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RETRO GAMER*

VOLUME TWO • ISSUE ONE

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RETRO GAMER*

Double Dragon
Birth of a beat-em-up legend

Star Wars
The original arcade trilogy

Elite Systems
20 years of gaming

Atari 5200
The SuperSystem story

eMag

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hello

They say that change is as good as a rest and as we have no interest in resting we've decided to go for a bit of a change instead.

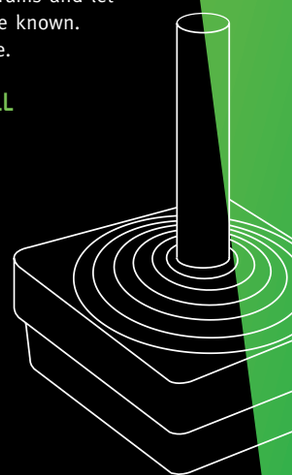
In this month's tightly-packed issue you'll notice that we've made a few alterations some major, and some minor. We've got a number of new regular features, including our monthly look back at key events in gaming's past in Back to the Eighties. We'll be taking a closer look at important retro series in Retro Revival, such as Metal Gear this month, and our bigger and better news sections will cover commercial and scene developments in much more depth.

Of course, we've also got a whole load of excellent features written by retro community members and experts in the field. Highlights include our Double Dragon retrospective and the first part of our Star Wars videogames history. We also take a closer look at the underground art of console and game hacking, and we examine one of Atari's greatest failures, the 5200.

So here's volume two, issue one. We've tried to plan and structure the magazine so that we give you the very best in all things retro, but we want to hear your thoughts. If you have any suggestions, or you simply want to comment on the changes, then don't hesitate to email us, or drop by the forums and let your comments be known.

Enjoy the issue.

MARTYN CARROLL
EDITOR



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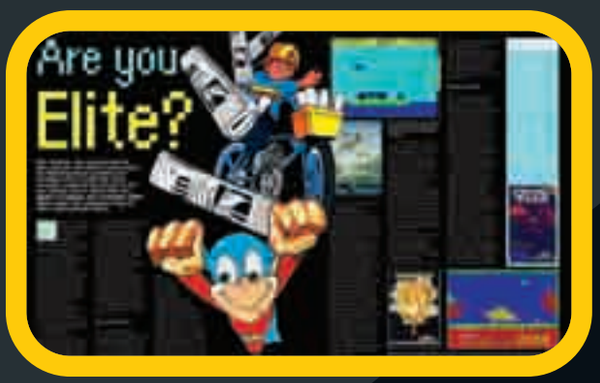

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Another issue draws to a close

More TV Classics

New range of plug 'n' play games are on the way

Riding the current wave of popular TV game devices, Arcade Legends creator Radica is set to release a further two titles in its ever-expanding range. Adding to the excellent Sega Mega Drive collection (of which volume II is reviewed on page 12), Radica is gearing up to launch two more MD-centric devices. This time the units will not feature a random collection of games though, but will each contain themed titles.

First up is the Sensible Soccer Plus unit. This will not only feature footy classic Sensible Soccer, but will also contain oddball RTS Mega-Lo-Mania and the hugely successful Cannon Fodder – all of which are MD versions of course.

The second new Radica title is even more intriguing. Street Fighter II Special Champion Edition comes in time to mark the 15th anniversary of the release of the legendary franchise, and unlike the previous Arcade Legends, which have been purely single player offerings, the SFII bundle will boast two player support, complete with two authentic MD six-button pads, while the Sensible bundle will feature two standard pads. As an added bonus, SFII comes with a bonus built-in game, the ever popular Ghouls 'n Ghosts.

Not to be left out of the market rush, competitor Jakks Pacific is also ready to launch a new TV game unit in the form of Midway classic Mortal Kombat. This single player unit (two players are supported via the use of two units) reproduces the original gore-stained scrapper, and rather than recreating a console version, the game actually features a perfect replica of the arcade original.

Radica's offerings should both retail for £29.99, with the SFII unit out in March (reviewed next issue) and the Sensible model following in May. Jakks Pacific's Mortal Kombat title should hit the shelves later this year.

Bounty Hunter

Earn hard cash by playing games

If you reckon that your skills at dodging barrels on Donkey Kong are unmatched, or your prowess with a whip in Indiana Jones and the Temple of Doom is untouchable, then why not make it official? Thanks to the wonder of the Internet you can not only prove your claims to one and all, but you can get money at the same time!

A quick visit to **www.twingalaxies.com**, the Official Electronic Scoreboard, will reveal that this year's 'bounties' are now up for grabs. Robert Mruczek, one of the website's senior judges, is offering cash prizes to anyone who can beat the various challenges he has set. There are over 100 different challenges on a wide range of systems, from MAME and Atari 2600 to the latest consoles such as the PS2 and Xbox. In total the prize money offered stands at around $20,000! Entries need to be submitted by 31 December 2005, so you've got plenty of time to get practising.

Important happenings in the wonderful retro world

Castlevania Resurrection

Vampire action rises again on PS2 and Nintendo DS

Just like the blood-supping vampires that fill its adventures, Konami's Castlevania series is refusing to die, and is due to resurface for even more evil-slaying adventures on both the PS2 and the Nintendo DS.

The PS2 title, Castlevania: Curse of Darkness will introduce a new character in the form of Hector (!?),

one of two Devil Forgemasters, whatever that may mean. Rather than focusing on the never ending battle between The Belmont clan and the forces of Dracula, as in previous games, this instalment will contain a totally new story which will be a "tale of betrayal and revenge". Once an ally of Dracula, Hector disliked his master's evil ways and went off to make a new life for himself. After Dracula's death at the hands of the Belmonts though, Hector is forced to return to his old home to do battle with former friend Isaac. Along the way we're promised a whole collection of environments, and more than a few devious bosses to outwit, all in full 3D similar in style to the previous PlayStation 2 'Vania.

The debut DS Castlevania title continues the alternative spin that the GBA title, Aria of Sorrow started. A year after the events in Aria of Sorrow (2036 to be accurate) the game plots the adventures of Soma Cruz and his mission to stop the resurrection of Dracula by a band of cultists. As well as the classic 2D Castlevania gameplay, this title will make the most of the DS' new technologies, such as the touch screen and dual displays. Players will use the stylus to draw magic symbols to unlock doors and combat magic for example, and the wireless capability of the DS will let fans exchange 'souls', which can be used to beef up their characters, sort of like a vampiric Pokemon.

Bombs Away!

Blow up your mates on the DS

Big-headed TNT lover Bomberman is heading to the Nintendo DS later this year, and multiplayer will be the name of the game.

Featuring the familiar Bomberman gameplay, players will be able to participate in wireless head to head gaming with other DS owners. The game will also use the dual screen to better capture the action and matches will be split into two arenas, one on each screen connected by tunnels. Up to eight players can connect wirelessly at once, making for some hectic matches. The touch pad will also come into play at some point, and a novel feature will be the ability to plant remote detonating bombs that are activated by shouting into the DS' microphone. Sounds like a blast.

It'll Be Myst

The classic adventure calls it quits

Myst is one of the biggest selling games of all time, and has appeared on a range of formats over the years, including the PC, Mac, Sega Saturn and PS2. Now, the last episode in the series has been announced, and the old school adventure is set to end in climactic fashion in Myst V: End of Ages This will take place directly after the events seen in the original instalment, and should tie up the story fully by revisiting the classic locations.

Xbox owners will also get a dose of Myst in the form of Myst IV Revelation, although at the moment no plans have been made to port the final chapter to Microsoft's black box.

Gizmondo Goes Supersonic

Sega Classic headed to new platfrom

The Gizmondo may be lagging behind the Sony PSP and Nintendo DS handhelds in the apprehension stakes, but thanks to a recent announcement, Gizmondo fans have something to look forward to. Gizmondo Europe Ltd recently revealed plans to release the Sega Classics Arcade Pack for the new handheld system, which will contain all-time classics Sonic the Hedgehog, OutRun, Golden Axe, Altered Beast and Shinobi. Each title will be a recreation of the Mega Drive originals, and so should present players with a collection of excellent games to play on the go.

Tekken For Nothing

Original going for a song

A special bonus for fans of the long running battler from Namco will be featured within the upcoming Tekken 5 – the original game! To celebrate the series' fifth incarnation, Namco is going to package the original PSOne Tekken for some truly excellent retro beat-em-up action. Whether the game will be included as an unlockable bonus or come on an separate game disc is not yet known. Tekken 5 is set for a late March release in Japan, and should find its way to Western shores in late May.

Even More Sonic...

The blue streak is DS bound

Although actual details are still thin on the ground, Sega's hero is definitely headed for the Nintendo DS, and the title will make full use of the dual display and touch screen functions. From the tiny section of game footage we've seen, the game looks like it's going to be a full 3D affair, like Sonic Adventure/Heroes, and will involve some track and field style control thanks to the extra control options mounted on the DS. Rumours also suggest that a new Sonic game, possibly a sequel to Sonic Adventure 2 Battle, will be appearing exclusively on the GameCube. Sounds unlikely though, especially as Sonic Heroes was such a massive multi-player hit...

Tetris To Go DS

Classic puzzler on new shores

Tetris – the game that almost single-handedly sold the GameBoy looks like it's heading to the new handheld. Although not officially confirmed, certain resellers already have Tetris DS listed on their release schedules, and as THQ currently owns the rights to the mind numbing puzzle title, we'd expect to see more information from its PR monkeys in the near future. Obviously it won't have the same impact as it did on the GB, but nevertheless new versions of Tetris are always welcome in our house.

eMag

BACK TO THE EIGHTIES

In the first of a regular series of retrospective piece, Retro Gamer turns the clock back exactly 20 years to February 1985 – a time of computer price wars and company crashes, computer shows and big games releases...

In early February 1985, Sinclair announced it was slashing the price of its Spectrum Plus to £129, having already cut the cost of the discontinued rubber keyboard machine to just under £100. Acorn quickly followed suit with a £70 deduction off its Electron computer, and also implemented a trade-in deal where it would give you £50 off a BBC Micro by bringing in any old computer as a part exchange. We wonder how many Electrons it received...

The failure of the Atmos finished off Oric. Amstrad, meanwhile, was preparing for the launch of its new CPC664 model

Later in the month, Commodore followed suit by halving the price of its Plus/4 computer from £300 to £150. The consensus of opinion for this price slashing was that Commodore was phasing out the Plus/4 in Britain and was selling off its remaining stock as quickly as it could following somewhat underwhelming sales figures.

Alas poor Oric

February turned out to be a terrible month for Oric too. Oric Products International, makers of the Atmos, finally called in the receivers. Dwindling sales in France, previously one of its most productive areas, had seemingly been hit badly by the arrival of the Amstrad CPC, which was selling exceptionally well in Europe. With poor sales of the Atmos (the successor to the Oric-1) and outstanding legal action against Prism, makers of the VTX5000 modem, who co-incidentally also called in the receivers the very same week, proved too much for Oric.

Oric was due to release its newest computer, the Stratos, primarily in France, but this was quickly shelved and never saw the light of day. However, later in the year, a French company called Eureka bought Oric and morphed the Stratos into a new computer, the Telestrat, which was released for the French market.

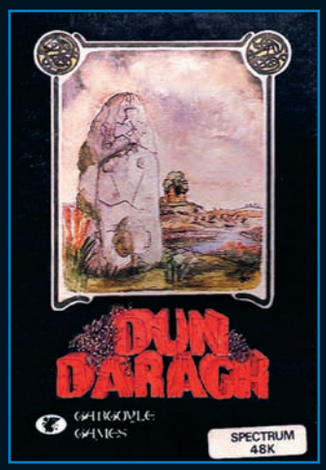
Acorn was having problems too. The company's shares were suspended mid-February after fears that all was not well. Internal financial policy disagreements, company restructuring and disappointing sales figures all added to its woes. With the enforced price cut after Sinclair had started the latest round of price wars, this led to further grief as Acorns' distributors became less than pleased with the situation. Trouble was most definitely a brewing. Could Acorn survive in its present state? Ultimately no. By the end of the month, Italian computer giant Olivetti succeeded in a takeover of the company with a £10 million rescue package.

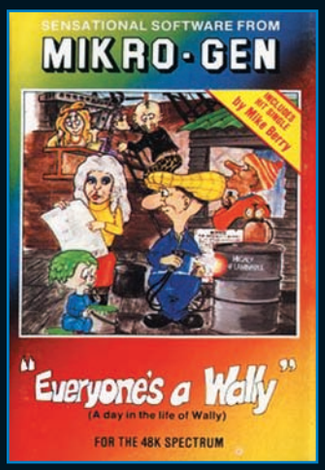
It wasn't all doom and gloom for the UK's computer manufacturers though. Amstrad and its CPC computers were going from strength to strength. Amstrad boss Alan Sugar announced this month that it was planning a new computer, the CPC664, possibly for launch in April. This would be similar to the CPC464 package, but would feature a built-in 3in disk drive at a cost of £399. After all, 3in floppies were the format of the future, right?

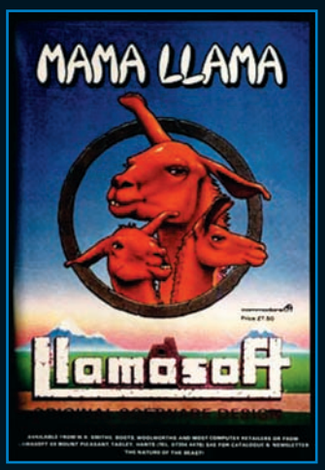
Show stoppers

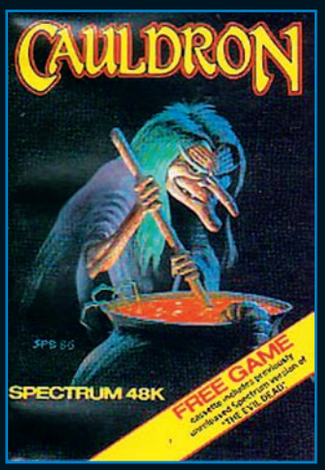
Two of the biggest UK computer shows of the year were held in February – the 15th ZX Microfair at Alexandra Palace, and the LET 85 International Trade Show at Olympia.

The three-day LET trade show was by far the biggest with over 200 companies exhibiting and most using it as a platform for displaying their new games for 1985. Some of the most well known software houses were in









Just some of the 8-bit games that debuted at the LET 85 trade show

attendance showing off sneak previews of forthcoming titles, such as Gargoyle Games previewing Dun Darach, the follow-up to the excellent Tir Na Nog, and Mikro-Gen with Everyone's A Wally, ably supported by a bloke in a large foam Wally Week suit and perhaps the most annoying song ever made recorded. Jeff Minter's Llamasoft was showing off Mama Llama and Palace Software had Cauldron on view. Oh, and Bug Byte had Automan... oh well, never mind hey...

Away from the shows, Quicksilva announced plans to release a charity compilation following on from the success of the Band Aid single which had been at number one in the music charts over the Christmas period (no change there then). The compilation would be entitled Soft Aid, would sell for £4.99 and feature ten games donated by various software houses.

Cancel the subscription!

Throughout the previous year, the computer magazine market had become more and more competitive, and by February 1985 there was already a casualty of war.

The vastly under-rated multi-format games magazine, Personal Computer Games, sadly folded after a run of just 15 gloriously glossy issues. It disappeared from the newsagents' shelves without as much as an official reason or a tearful wave goodbye. The last issue still left us clinging to hope with the usual 'Next Month' contents banner page, but no, that was your lot. It had gone. Only Big K, another multi-format magazine, managed a smaller run, with just 12 issues. However, on a good note Personal Computer News, a weekly magazine, reached its 100th issue this month.

And that was February 1985.

›Game watch

Perhaps the biggest title of the month was the Spectrum version of Alien 8 from Ultimate. With Amstrad and BBC conversions to follow in a few months, this would presumably explain the flood of Ultimate advertising in computer games magazines. Reaction to the game itself was mixed however, with different camps split on whether it was a gaming classic or simply a rehash of Knightlore. Looking back, it was probably both.

Computer And Video Games' reviews selection for this month included some splendid offerings in the form of Cyclone (Vortex), Boulderdash (Front Runner), Dark Star (Design Design) and Combat Lynx (Durell), all out for the Spectrum, as well as Attack Of The Mutant Camels (Llamasoft) for the Atari 8-bits and Henry's House (English Software) for the Commodore 64.

Also on the C64 front, Quicksilva released a couple of disk games, The Dungeons of Ba and Gryphon, the latter being programmed by Tony Crowther. Beyond's excellent two player game, Spy Vs Spy, was also reviewed and received praise from almost everyone.

Software releases for the Amstrad CPC this month included an all-time classic in the form of Sorcery (Virgin), along with the evergreen Football Manager (Addictive). Amstrad's own software arm, Amsoft, got in on the act by re-releasing two classics from other companies, Pyjamarama and Splat! And not content with that it also released a further two offerings in the Roland series – Roland On The Run and Roland Ahoy.

›Top Five Charts (Feb 1985)

Commodore VIC-20

1. Perils Of Willy (Software Projects)
2. Flight 015 (Craig Communications)
3. Max (Anirog)
4. Duck Shoot (Mastertronic)
5. Snooker (Visions)

Commodore 64

1. Ghostbusters (Activision)
2. Booty (Firebird)
3. Daley Thompson's Decathlon (Ocean)
4. Kong Strikes Back (Ocean)
5. Hunchback 2 (Ocean)

ZX Spectrum

1. Booty (Firebird)
2. Match Day (Ocean)
3. Ghostbusters (Activision)
4. Cyclone (Vortex)
5. Daley Thompson's Decathlon (Ocean)

Amstrad CPC

1. Flight Path 737 (Anirog)
2. Grand Prix Driver (Amsoft)
3. Snooker (CDS Microsystems)
4. Hunchback (Ocean)
5. Manic Miner (Software Projects)

Retro Rated

Welcome to the Retro Gamer reviews section where our team puts the latest commercial releases to the test...

Arcade Legends Mega Drive: Volume II

Another gaggle of Sega classics is making a TV comeback, thanks to Radica's second coming

Developer: Radica **Price:** £29.99 **Format:** N/A **Players:** One

Dubbed Arcade Legends, this authentic Mega Drive joypad plugs directly into your TV and lets you play perfect reproductions of some of Sega's most popular classics. After the sucess of the first MD outing, Radica has released a second volume, and it comes complete with a further six games from Sega's hugely successful 16-bit monster – Sonic the Hedgehog 2, Ecco the Dolphin, Columns, Gain Ground, The Ooze and Alex Kidd in the Enchanted Castle.

Everyone will be familiar with Sonic 2. While being light on overall challenge, Sonic 2 upped the bar dramatically when it

>Our Arcade Legends

If we had control over the third volume of Radica's Mega Drive TV games collection what games would we like to see included?

To keep up with the tradition we'd definitely include a Sonic title, but rather than go for Sonic 3, which was a little weak, we'd go for the much better Sonic and Knuckles. Gunstar Heroes would just have to be included, although to get the most out of it we'd need two player support. Next we'd opt for some classic RPG action with Shining Force, and follow that up with one of the greatest scrolling beat-em-ups ever – Streets of Rage II. And the last title would have to be ThunderForce IV, one of the best-scrolling shooters ever made, on any format.

So, that's what we'd like to see, but what about you? Pay a visit to the Retro Gamer website (www.retrogamer.net) and jump onto our forums and let us know what your ideal TV gaming system would be, along with five classic games for the format. We'll print a selection of your posts next month.

arrived on the Mega Drive, and the sheer polish Sega had given its beloved mascot was instantly apparent. The levels and zones were great, the added two player mode increased the game's appeal and the technical wizardry of the 3D bonus level dropped jaws everywhere.

Ecco the Dolphin is another title that took the gaming world by storm when it arrived. Taking control of Ecco, your mission was to save the world from an invading alien race who planned on devouring the world's sea food. Rock hard puzzles and underwater action was the order of the day here, and while it was frustrating to the point of insanity, the fast and fluid controls and gorgeous graphics made it well worth your time.

Columns was basically Sega's Tetris, and although it never even approached the popularity of the Russian puzzler, it was a fine game in its own right, especially in two player mode, and the simple colour matching still holds up today. Alex Kidd In the Enchanted Castle is an underrated gem in our opinion, and once you see past the childish stylings, you'll find a great game underneath. This also applies to Gain Ground, an obscure title in which you have to fight off wave after wave of enemies while using a dose of strategic thought.

The last game is the oddity that is The Ooze. This is an obscure title in which you control a large amorphous blob of green slime and have to work your way through levels making the most of your liquid form while avoiding any critical damage to your still vulnerable head.

Play with yourself

As with the previous volume, this second version of the Radica Mega Drive offers perfect emulation, and all of the games run exactly like their original counterparts. The joypad feels exactly like the original clunky Mega Drive pad, and the menu system for the games is simple. The titles on offer are all great too, especially Sonic and Ecco, which are fantastic single player games. However, like the first Arcade Legends, this model also suffers from no two player support. This is worse this time around though thanks to the inclusion of more two player titles. Columns is a classic two player game that is rendered one player only, Sonic 2's Vs mode is useless, and Gain Ground is far more enjoyable with a friend joining in on the action.

Luckily, the lack of a two player option isn't enough to damage this Mega Drive outing from Radica too much, and all the games featured are enjoyable in single player. With games as challenging as Ecco included, you'll have more than enough to keep you busy.

Rating:

Sonic Mega Collection +

Relive the golden age of platforming with more hedgehog than you can shake saucer of milk at

Developer: Sega **Price:** £29.99 **Format:** PS2, Xbox **Players:** One/Two

As one of the single most iconic figures in gaming history, Sega's uber hero, Sonic the Hedgehog, has had more games to his name than most other characters put together, and he's appeared on practically every platform you can name. Ever since the first title appeared on the Mega Drive way back in 1991, gamers have lapped up every second of the blue guy's super speed and his never ending battle against the rotund mechanical genius, Dr Robotnik. Along the way Sonic picked up many new friends and enemies, including Tails, Amy, Knuckles and a collection of robotic and evil versions of our loveable speed freak. And, like Mario, Sonic has also broken free of his conventional platform trappings, expanding into adventures, puzzle games and more. He's also entered the 3D world with two next-gen titles, Sonic Adventure 1 and 2, as well as the recent Sonic Heroes. And now Sega has released this awesome collection of all things Sonic.

Previously available on the Nintendo GameCube, Sonic Mega Collection included all of the 16-bit Sonic titles, emulated to perfection. This remains unchanged here, but thanks to the additional 'plus' that's been tagged onto the compilation's title, this new collection also contains a whole lot more.

Crammed into the neat menu-driven front end of the disc you'll find all the Mega Drive classics Sonic 1, 2, 3, Sonic and Knuckles, Sonic Spinball, Sonic 3D Flickies' Island and Dr Robotnik's Mean Bean Machine. As well as the 16-bit titles, the disc also contains many of the Game Gear offerings, including Sonic the Hedgehog, Sonic Labyrinth, Sonic Drift, Sonic Chaos, Sonic Blast and the handheld version of Mean Bean Machine – phew! But, that's not all folks, and there's a further selection of secrets to unlock, which includes even more classic games.

Original and best

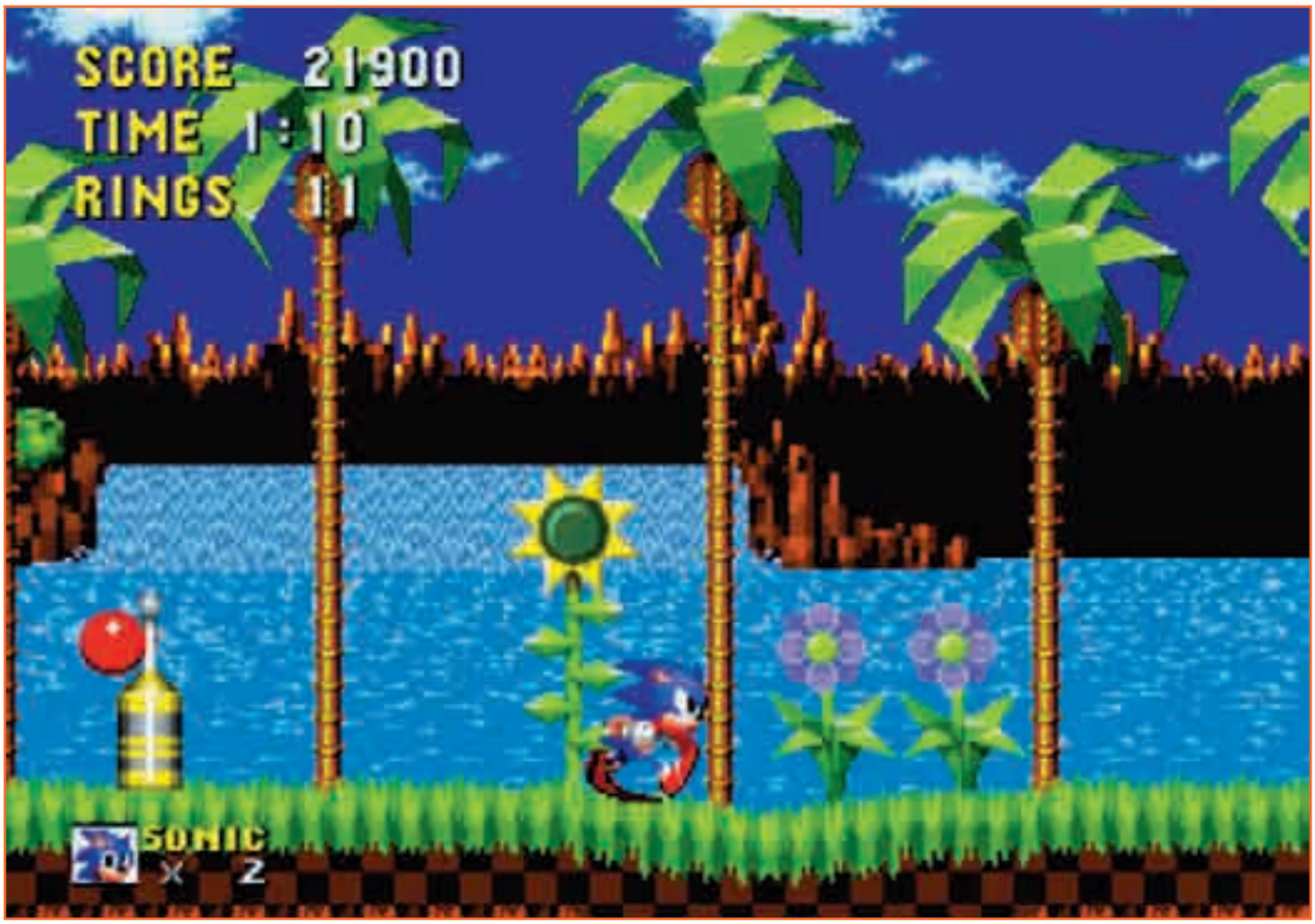
It's a certainty that almost all players will go right for the original Sonic game when they fire the compilation up – what better way

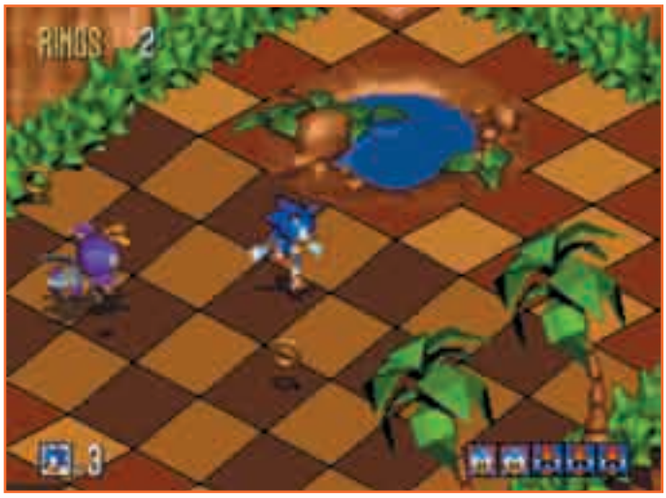
to relive those heady days of the Mega Drive than roaring through that first loop de loop, or doing battle against Robotnik and his chequered demolition ball? And it's with this first go that you realise how good this collection is. The emulation of the Mega Drive is perfect, right down to the slow-down when you lose a ton of rings, and the ability to enter original cheats. Blasting through the Green Hill and Marble zones is as much funs as it ever was, and this carries on over the entire 16-bit era. Sonic 2, arguably the best Sonic game of all, is still amazingly easy but the refined level design, two player options (including the squashed split screen mode) and stack of cool stages galvanise the retro appeal of Sega's platform genius. Sonic 3 and Sonic and Knuckles are also perfectly presented, and all their features remain intact.

A huge plus point to the compilation has to go to the inclusion of the spin-off Sonic titles. Sonic Spinball may not have received a warm welcome initially, but over time people have begun to warm to the challenging take on the tabletop flipper, and as you can save at any time in this collection (in all titles), Spinball's irritation factor is now not a problem, and you don't have to replay all the levels from the

›Extra! Extra!

As well as all of the Sonic games featured, there's a whole host of secret content waiting to be unlocked in the collection. You can eventually unlock the ability to play as Knuckles in Sonic 2 and 3 and you can also unlock whole games, including Ristar, The Ooze and even the innovative battler, Comix Zone. Unlocking all of this content involves meeting specific requirements, such as playing a game a set number of times, or you can bypass much of this if you have a Sonic Heroes save game on your system.





beginning. Admittedly, Sonic 3D Flickies' Island isn't so hot, and its psudeo-3D doesn't really work, but Dr Robotnik's Mean Bean Machine is as addictive and playable as it always was, and if Sonic 2 wasn't included, would have secured its place as *the* reason to buy this collection. Trust us, this is frighteningly addictive stuff, and it hasn't aged a bit.

Sonic on the move

The Game Gear was well serviced when it came to Sonic games, and as well as a take on the original Mega Drive Sonic, it had more than its fair share of unique titles. While the likes of Sonic Blast, Sonic Labyrinth and Sonic Drift are fairly poor outings, the inclusion of Sonic Chaos is a master stroke, as this is by far the best Sonic game on the Game Gear, and is still amongst the best Sonic titles. Again, like the Mega Drive versions, the emulation of the Game Gear is spot on, although when blown up on a large screen the graphics do end up looking a little worse for wear.

As a retro collection this can't go wrong. Sonic games are pure class and having all of the big guns on one disc for today's consoles is excellent. But, it's not all good. As we've already said, some of the games included aren't that great, and have been included really for completions sake, which oddly reveals our major grievance – where in blue blazes is Sonic CD? The Mega CD's time travelling Sonic outing was a great game, and would have been a prime addition to the mix, but it's sadly missing from the line up.

Despite this, the simple platform formula, coupled with mad bosses, great level design and all sorts of added extras should grip old hands and newcomers alike. If you're a Sonic fan this is an essential purchase, pure and simple. If you've never played any of the 'hog's games then this is the best place to start.

Rating:

›Do you want fries with that?

It's not just games that can be found on the Mega Collection. Delve into the menu system and you'll find a section containing the instruction manuals for all the Sonic titles, and you'll also find a special Sonic gallery. Here you can view illustrations, comics, and movies from Sonic games past and present.

Metroid

Samus Arran's debut outing makes a comeback on the GameBoy Advance

Developer: Nintendo **Price:** £14.99 **Format:** GBA **Players:** One

Another new NES re-release for the GBA is Metroid, Samus Arran's first ever adventure, and the inspiration for a whole collection of games over the years.

The first Metroid, while clearly limited by the technical shortcomings of the NES, broke new ground in many ways. The sheer complexity of the game, and the scale of the world in which players fought was very impressive, as was the ability to power up Samus' armour with a range of extra abilities. The title also featured four-way scrolling and great sprite handling, allowing for multiple enemies onscreen and some impressive boss battles.

The plot of Metroid is simple really. As Samus you have to explore the planet Zebes in order to find an alien life form (a Metroid) that has been stolen by a band of space pirates. Should this life form awaken, it could destroy countless planets. Your mission – infiltrate the pirate's planet base, find the Metroid and eliminate the master of the heist, Mother Brain.

The core gameplay of Metroid is still extremely solid, and although the graphics have obviously aged over time, the game still plays every bit as well as it ever did. Exploring the planet and its varying environments in order to find new weapons and abilities is challenging and actually requires a lot of thought, rather than just simple button bashing. The more skills you acquire, the more areas you can reach, keeping the game interesting throughout. Samus can also inherit abilities from her foes, and you can increase her maximum health, which is essential when going into battle with one of the game's many outlandish bosses.

The re-release of Metroid has a major fault though, and that's the *whole point of the thing*. Let us explain – if you've already bought the recent GBA remake of Metroid (Zero Mission) then you not only have a better title overall, but it includes the original game as a free unlockable bonus! So you can spend an extra £10 and get the excellent Zero Mission and the original game in one go. This alone means that as good as the original Metroid is (and it is good), it's very hard for us to recommend this, and you really should get Zero Mission instead. We'd gladly have given Metroid a much higher mark on its own merits, as it's a classic title worthy of anyone's collection, but paying fifteen notes for a game that can be found for free elsewhere (on a game that most Metroid fans will already own) is a little much. Nintendo should really know better.

Rating:

›Return of Samus

Rather than release a sequel for the NES, Nintendo developed Metroid II as a GameBoy exclusive, and Samus' second adventure has not appeared on any other platform, yet... A quick trip to eBay will reveal a whole army of people with original copies of the sequel up for grabs, so grab one while you can, as you can always slap it into your GBA.

Zelda II The Adventure of Link

Love it, or hate it, the second Zelda is back on the GameBoy Advance

Developer: Nintendo **Price:** £14.99 **Format:** GBA **Players:** One

After pushing back the gaming boundaries with the original Zelda title in 1986, Nintendo went back to the drawing board and a year later Zelda II was released. Following on from the original game, players once again took control of Link, only this time your goal was to re-unite the lost pieces of the sacred Triforce in order to bring Princess Zelda out of a cursed sleep. Of course, all sorts of enemies, including the army of Ganon are on hand to stop our young hero.

Now making its reappearance on the GBA, Zelda II is available to a whole new generation of fans, but how does it fare? On its original appearance in 1987, Zelda II instantly caused a fuss. Ditching the single top down view of the original (to try and please Western audiences), Zelda II was split into two modes, top-down and side-scrolling. When on the large world map you control Link in a top-down fashion, travelling the countryside in search of towns and dungeons. When you enter a town or get caught by an enemy the game switches to the side-scrolling mode. This behaves more like Metroid than Zelda, and didn't go down too well back in the day.

Sadly, this still doesn't wash, and while we know that this outing does have its fans, we're not convinced. This simply isn't the Zelda we all know and love. Controlling Link and getting used to the different style isn't really a problem, but the experience system just doesn't fit, and just

gets in the way of Zelda's pure and simple gameplay.

There are still plenty of classic elements though, and as in every Zelda game, you will acquire various new weapons and items on your quest, many of which will open up new areas to explore. You can also talk to people in towns to find out clues and information, and you can wander around the wide open world looking for secrets. All very Zelda, but at the same time, it plays very differently.

The constant switching between top-down and side-scrolling perspectives doesn't fit together very well at all. Side-scrolling combat consists of merely swiping your sword, making even the boss fights very simple and repetitive, and although the game has plenty of Zelda-esque ideas, it never really captures the feel, charm or fluidity of the other titles in the series.

The translation of the game to the GBA is perfect though, and the game is reproduced faithfully, so hardcore fans will love it. But, for just a tenner more you can grab hold of the infinitely better Minish Cap, or even classic Super Nintendo port, A Link to the Past, which we'd recommend for most GBA owners.

Rating:

›Golden Child

Along with the original Zelda title, Zelda II: The Adventure of Link was the only other official Nintendo NES game to be blessed by having a gold cartridge. The Later SNES incarnation had to make do with a gold box only.

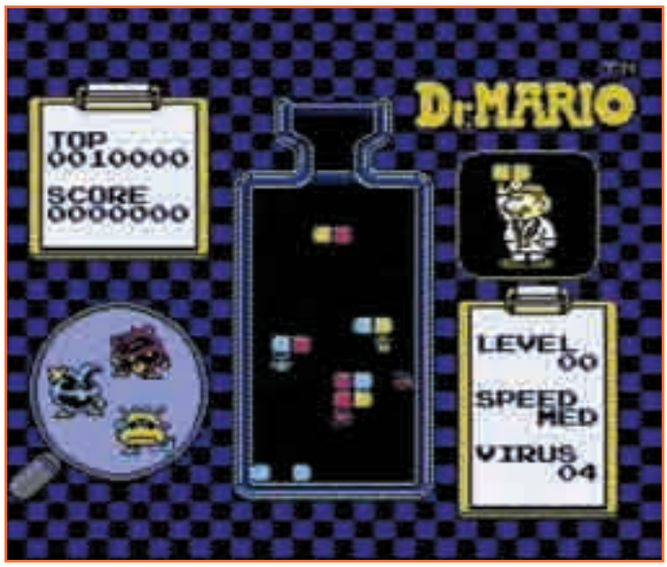
Dr Mario

Feeling a little off-colour? Let the good Dr Mario cure all your ills

Developer: Nintendo **Price:** £14.99 **Format:** GBA **Players:** One/Two

In the wake of the hysteria caused by GameBoy smash Tetris, practically every games developer started to look for its own particular way of cashing in on the new puzzle craze that the Russian game kick-started. This rush produced all manner of Tetris clones, some of which were straight copies, and some that were far more imaginative. Sega gave the world addictive games like Columns and Puyo Puyo and Nintendo came up with a rather odd addition.

In a time when the world couldn't get enough of Mario, Nintendo pushed the plumber on everyone like a dealer down a back alley. Mario starred in racing games, tennis games, painting games and even a typing tutor! Not content with his vast array of skills though,



Mario went back to school and dipped into the medical world for his first puzzle-based offering, and the pill-popping Dr Mario was the result.

Perhaps one of the most original takes on Tetris, Dr Mario isn't quite as simple as dropping blocks onto each other, matching colours or making lines. Instead, the play area is a bottle that contains a number of nasty viruses. By dropping multicoloured pills on top of these viruses and matching four colours in a row, you could kill the critter in question. Once all the viruses in the level are vaccinated, you move on to the next wave. While you do this though, you have to make sure you don't fill the bottle, or it's game over. To add to the challenge Mario gradually throws pills into the bottle at a faster rate, so speed is of the essence.

Dr Mario is one of those games that seems a little flaky at first, but it quickly grows on you as you get used to the original spin on the puzzle genre. Eventually, as in all good puzzlers, you'll develop your own style of play, and in two player this really comes to life; 'chaining' colour combos together results in more pills falling into your opponent's bottle at once, making their lives more difficult. What's more, unlike Tetris, where experienced players can go on for hours and hours with little challenge, Dr Mario is devilishly tricky from the word go, and always keeps you on your toes.

While Dr Mario isn't the best

example of the puzzle genre around, and the likes of Tetris and Puyo Puyo are still superior overall, it's a great game all the same and its new incarnation on the GBA brings the title back to its mobile roots.

Rating:

›Super Mario 4?

Dr Mario goes down in history as being the very first Mario game from Nintendo where the player couldn't actually play him. On its original release in 1990, many fans hailed it as Mario 4 as it was the first in the franchise to be released after Super Mario Bros 3. It's believed that this argument is the reason the next 'real' Mario game dropped the number and was subtitled Super Mario World instead.

Castlevania

In the heart of Transylvan-ia, in the vampire hall of fame – yeah!

Developer: Nintendo **Price:** £14.99 **Format:** GBA **Players:** One

There have been many sequels since Simon Belmont first cracked his whip and threw an unfeasibly large axe at a floating Medusa head, and over the years the series has evolved into a totally different animal than it once was. Castlevania can now be found on PS2 in Devil May Cry-a-like 3D fare, and the GBA has many vamptastic adventures, most recently Aria of Sorrow, a classically styled episode that takes place in the future. But, it's the original game where it all began, and this can now be found on the GBA in all its 8-bit glory.

Castlevania (called Demon Castle Dracula in Japan) introduced the world to Simon Belmont, bullwhip wielding vampire hunter on a mission to vanquish the evil Count Dracula. Rather then utilising classic vampire killing devices like crucifixes and garlic, Simon pelts the bad guys with his whip (which you can upgrade to a morning star) and batters them with a range of secondary weapons like knives and axes.

Gameplay is straightforward classic platform action, albeit on a much more sluggish trend. Each level contains multiple floors to visit, and there are more than enough pitfalls to fall foul of (especially if a bat catches you in mid-jump and knocks you down a gaping chasm, Arrgghh!). Of course, Castlevania is known for its great boss fights, and the first is no exception – you'll fight giant bats, mummies, Frankenstein and of course, the Count himself. Sadly, the game always did have its faults, and it still does. Simon is very slow in responding, and many deaths are caused by his lack of attack speed. He can't whip up or down either, making it a real chore to obtain some of the more 'strategically' placed powerups. And, although our Simon can single headedly tackle an entire army of beasties, he still has trouble with the stairs, and the number of times you'll forget to press diagonal to walk up or down stairs is irritating to say the least. But don't let these hiccups stand in the way of what is otherwise an excellent title.

Simon Belmont's first adventure makes a great transition to the GBA, and although it's over 10 years old, you can clearly see where the slew of sequels got their inspiration from. The gameplay is tough has old boots, and more than a little frustrating. But it's all handled so well that you can't help yourself coming back for just one more go.

Rating:

›Castlevania Prologue

Interestingly, Castlevania isn't technically the first game in the series to appear from Konami. In 1986, a year before the NES release of the original, Konami released a game called Vampire Killer on the MSX (a Konami trend). Vampire Killer and Castlevania were almost identical, both featuring the same character, gameplay and even using the same box art. But, as Castlevania quickly became the household name, it was this series that spawned sequel after sequel, while the Vampire Killer name disappeared into the ether. However, the name did resurface later on the Mega Drive, where it bore the title Vampire Killer in Japan, but it was mainly known as Castlevania: Bloodlines (US) and Castlevania: The New Generation (Europe).

Castlevania (NES)...

...Vampire Killer (MSX)

Very soon European PS2 owners will finally get their hands on the long-awaited Metal Gear Solid 3, that latest instalment in the long running stealth espionage thriller from acclaimed developer Hideo Kojima. But what's the story behind the legend?

Way back in 1987, the adventures of Solid Snake began in the MSX release of Metal Gear. This was far removed from the 3D game we've come to know and was a top-down affair more akin to Zelda than a military sci-fi romp. But, this didn't mean the game was any different in style. As Snake you still had to use stealth and tactics to avoid the enemy as you infiltrated a military compound.

While not having the technical oomph of the later games, Metal Gear still contained some great stealth elements, including hiding in shadows and sewer grates, and the use of the traditional Metal Gear communication, the Codec. And the figure behind the terrorist army was Big Boss, a name that would resonate throughout the series. Most diehard MG fans still consider the first game to be the pure MG experience, but as the MSX didn't really do too well in the States, it wasn't until the release of the NES version in 1988 that the game really took off and found its fan base.

Rock Solid

Hoping to continue the success he had found with the original, Kojima eventually released a sequel to the first game. Titled Metal Gear 2: Solid Snake, players once again adopted the role of Solid Snake, only this time he was up against the Middle Eastern nation of Zanzibar. After amassing an impressive array of weaponry, Zanzibar had started to invade other nations, warranting the intervention of Fox Hound Special Forces – namely Solid Snake. Big Boss was the head goon once again and Snake even had to fight with former best friend Grey Fox. The plot was a little hard to swallow to be honest, and in true MG style it went up, down and round the houses in a typically convoluted way. But, the game was still a masterful stealth affair, littered with classic Metal Gear moments, and Snake was fast becoming a gaming icon. Sadly

Konami's original Metal Gear game was originally released on the MSX before being ported to the NES

›Fake Snake

One MG title that has since been dumped by Konami is Metal Gear 2: Snake's Revenge, which appeared on the NES in 1990. This wasn't an actual Kojima title and was developed by a separate Konami team. It still featured Snake and the same game world, but the story and events depicted were nothing to do with the existing series. The game took place between the events seen in MG1 and the true MG2, and featured one of the most ridiculously named villains of all time – Higharolla Kockamamie! This oddity is often left out of the core Metal Gear timeline with good reason.

The true sequel to Metal Gear is something of a rarity these days, having only appeared on the MSX

Metal Gear Solid is easily one of the top five games released for the original PlayStation

Poor Raiden. Surely one of the most vilified characters in videogame history!

though, as MG2 only appeared on the MSX many Western fans were left in the dark.

Battle stations!

Any backlash that Kojima received from the absence of MG2 on the NES would eventually be long forgotten though, and many years later, the arrival of Sony's PlayStation would herald the arrival of one of the greatest games of all time, and in the eyes of many, the best Metal Gear game ever created – Metal Gear Solid.

Snake's arrival on the PSone was instantly met with critical acclaim. The all-new 3D engine and Hollywood blockbuster styling catapulted both Snake and his creator into the gaming stratosphere. As Solid Snake, the game pitted players against a whole terrorist army, and a group of superhumanly-skilled bosses. The stealth was improved to include all sorts of extra elements, such as air vents, cameras, laser nets, security systems and the unforgettable cardboard boxes, all handled in full, impressive 3D. Remaining true to the original title's gameplay Kojima infused the game with all sorts of amazing features. The use of the Dual Shock's rumble pad was pure genius, and we'd challenge anyone not to find Psycho Mantis' manipulation of the pad hilarious.

Kojima rode the MGS wave with a few additions to the series, including an add-on disc for the PSone called VR-Missions, and an exclusive GameBoy Color title.

Taking liberties

Snake's PSone adventure sat at the top of the tree for a long time indeed, but not one to rest on his laurels, Kojima was hard at work on the next Metal Gear title, set to arrive on the PlayStation 2.

Metal Gear Solid 2: Sons of Liberty made its appearance in 2001 and featured stunning visuals, an incredible movie quality soundtrack and a surprising twist – gamers would spend most of the game as new boy Raiden, not Solid Snake. Sadly, this decision upset many fans, and although Sons of Liberty had all the hallmarks of a classic Metal Gear game, the over the top story, masses of pointless dialogue and little actual gameplay spoiled what could have been an all-time classic. Kojima tried to remedy this by releasing Metal Gear Solid 2: Substance, but it was too late, and asking punters to pay full price for the same game with a few additions was a little cheeky.

Reptile gobbler

Following the disappointment of Sons of Liberty, fans eagerly await the next instalment of the Metal Gear series – Snake Eater. This may boast a ridiculously Carry On title, but trust us when we say that this could be the MGS sequel gamers have been waiting for. Set in large open jungle areas as well as the usual corridor-laden secret bases, Snake Eater looks set to be the best Metal Gear yet.

Snake Eater aims to increase the challenge, and as well as improving on the graphics and general gameplay, Kojima and Co have made some very interesting changes. For one, there's no radar. So there's no more knowing exactly which way guards are looking and how far they can see, and you'll have to use your own judgment to stay hidden. You'll also have a whole range of CQC (Close Quarters Combat) moves at your disposal, rather than simple punches and neck snaps. Snake will also have to hunt for food to stay healthy and you'll have limited space in your inventory, so you'll need to carefully choose which weapons and items you cart around. Camouflage is anther big element of the game, and during Snake's travels through the jungle, you'll need to make use of various clever disguises in order to hide from your enemies.

But, don't worry about the classic formula changing though and rest assured that Snake Eater will be heavy on story, cut scenes, stealth and everything else that has made Snake's adventures such instantly recognisable titles.

›Metal Gear Acid

As well as the series' new incarnation on the PS2, Metal Gear is also headed to Sony's new portable system, the PSP. Metal Gear Acid isn't going to be the usual fare though, and instead of the standard control system and stealth, the game will revolve around the use of cards, much like the range of Japanese card-collecting games currently sweeping the nation. Using these cards, which include such abilities as a SOCOM pistol, medpac, bombs and so on, you can make decisions about what Snake does in the game. There are also unique character cards that feature special abilities from such classic characters as the Cyborg Ninja (Grey Fox) from MGS and even Metal Gear Ray from MGS2.

The third MGS is available in Europe from March, and the PAL version boasts exclusive features

Welcome to Retro Gamer's brand new section devoted to (and produced in) Japan. Each month we'll bring you an insight into the Japanese games and hardware of yesteryear, direct from Kyoto, and we'll keep tabs on Japan's thriving retro scene. Itadakimasu!

>Format focus: Famicom Disk System

Until the GameCube's release, Nintendo trumpeted the virtues of cartridges in order to justify its strict adherence to the silicon medium. But even back in the early Famicom years (from 1985 onward) NCL was playing around with disk-based solutions. The most successful and historically significant of these adventures resulted in the Famicom Disk System.

Remarkably, the original Japanese edition of the very first Legend of Zelda title was not released on cartridge. In fact, Zelda No Dentetsu was the first ever disk produced for Nintendo's Famicom Disk System. Beyond the realms of Link's first adventure, the FDS's software library was made up of 8-bit classics from Nintendo, Konami and others, sublime curios such as the ROYAL-developed Super Mario's Sweater (a cross-stitch simulation, no less), and unlicensed pap from smut-pushers such as the notorious Hacker International. As Hiroshi Yamauchi recently conceded in an interview with the Tokyo Metropolitan Museum of Photography: "It would be a lie to say that there wasn't a single game that was 'trashy', but those things did not stand in the way of the Family Computer." Indeed, within those two fields of quality and curios lies plenty to discover.

Gunpei Yokoi's original Metroid game (recently re-released in the GBA's NES Classics range, and reviewed in this issue) appeared in Japan – you guessed it – only as a Famicom Disk. Subsequently, many classics appeared in disk format: Kid Icarus, The Adventure Of Link (Nintendo's ill-judged Zelda sequel), Taito's supreme Bubble Bobble, Konami's first Dracula game (aka Castlevania), and Nintendo's own Mario-starring F-1 Race. Super Mario Bros 2, which appears on the SNES/SFC Super Mario All-Stars/Mario Collection as Lost Levels, was only released for the FDS. More interestingly, the FDS was home to Doki Doki Panic. This is one of the most fascinating disk titles, as it is the third-party embryo of what was released in the West as Super Mario Bros 2 – a non-Nintendo game which was bought and redressed as a bona fide NCL title.

While standard Famicom disks are yellow, Nintendo

A standard yellow disk and the special blue alternative

occasionally released limited colour variants as competition titles. Mario Golf: Japan Course, for example, was delivered on royal blue disks. Back in the day, these disks were readable on special in-store machines which collated the data and beamed hi-scores to Nintendo who, in turn, rewarded the nation's most impressive entries with prizes such as gold-coloured Famicom disks and special versions of Nintendo software. This sort of reward system quickly had Japan's pioneering gamers in a state of frenzy. The Famicom Disk System was essential.

Dodgy disks

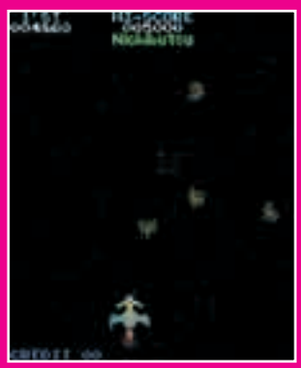
However, in 1988, Nintendo abruptly pulled the plug. The FDS's life support was turned off. In spite of huge success on a statistical level, the FDS revenue model was suffering due to rampant piracy and low game prices (downloading a new game to disk could be done for as little as Y500, while new official releases averaged Y2,500 – half the price of carts). Maybe that explains Nintendo's real pre-GameCube fear of easily writeable formats...

These days, the FDS hardware is quite easy to find. You can

The third batch of Famicom Mini games are based on titles originally released for the FDS, and this is reflected in the packaging

›Daihitto! Award

This month's Daihitto! (big hit) Award goes to Nichibutsu's fine Arcade Classics collection



This is a relic which we picked up the other week from a small indie store on Kyoto's Teramachi-dori. Nichibutsu isn't exactly a household name (even in Japan), but the obscure developer worked up some real corkers in its heyday. Nichibutsu also goes by the name of Nihon Bussan; the company gave up on mainstream console game production after the 32-bit era, while its line of arcade games effectively ended in the early 90s. Today, Nichibutsu continues to develop dodgy voyeuristic idol 'games' for selected arcades and, um, mahjong simulations.

Nichibutsu Arcade Classics collects the developer's entire output during the years of 1980 and 81 on one Super Famicom cartridge. Sequentially, these are: the wonderful vertically-scrolling galactic blaster that is Moon Cresta, King Kong-inspired Crazy Climber, and the frankly mediocre Frisky Tom. Still, those first two, Moon Cresta in particular, are choice cuts. Crazy Climber is self-explanatory, really. Assail a skyscraper to meet your simian archenemy. The gameplay is of the twitch-based variety.

Moon Cresta features impressive alien enemy waves whose movement makes for gameplay that is challenging, frantic and never monotonous. Likewise, the ability to upgrade your craft by docking at a mothership adds a strategic element that sets Moon Cresta apart from many of its contemporaries. To top it all, Moon Cresta is a visual treat when seen via a Super Famicom through a TV/monitor. This Nichibutsu compendium is essentially all you need from this Japanese company's back catalogue.

From top to bottom, Moon Cresta, Crazy Climber and Frisky Tom

›Tokyo Web

The Internet in Japan is a peculiar lair. Here we will guide you to some of its most fascinating destinations

Something of a postscript to our examination of Nintendo's Famicom Disk System: ASCII released a game on the format which was well ahead of its time, predating modern classic Rez by nearly 15 years. We're talking about Otocky. The game is ostensibly a shoot-em-up but, like Rez, it has a responsive audio element which enhances the experience. To hear some of the glorious results in MP3 format, check out www2.osk.3web.ne.jp/~hani/otockey.

Again, keeping this month's Famicom theme in mind, we must notify you of Scitron. The first two volumes of Scitron's Famicom Music compilations have been playing at our place for quite some time, but recently – to celebrate 20 years of the Famicom – the label added three new volumes to its discography. Following on from the core old skool of Volume 1 (Mario Bros., Donkey Kong, etc) and the FDS skew of Volume 2 (the original Zelda theme must surely rival Bubble Bobble's as greatest ever game tune), the additional Original Game Soundtracks releases compile pretty much everything Japanese kids ever heard emanate from the Famicom's wimpy sound chip. If you can't get hold of these stupendous albums, at least take a moment to add some retro chic to your desktop with the Scitron images found here: **http://famicom20th.webcity.jp/dl.html.**

Finally, a little something to listen to. Retro PC Game Music Streaming Radio, direct from Japan, is a sonic revelation which you owe it to yourself to tune in. We'll be taking a look at the MSX format in a future issue. Until then, tune in at **http://gyusyabu.ddo.jp/MP3/MP3.html** for some idea of what lies in store.

The FDS lives on! One of the collectable items in Pikmin 2 on the GameCube is a Famicom Disk

expect to shell out around Y8,000 (£40) for the base unit, but of course you'll need an actual Famicom to get the system working (and that will set you back Y8,000 as well). Depending on whether you opt for the original Famicom model (which is what the FDS was designed for) or 1993's re-released AV Famicom model, you'll have either RF output (in the case of the original) or RCA via composite. The AV Famicom's only downer is that it doesn't sit so well above the Disk System – it looks a bit silly, where as the original still looks supercool.

Another alternative is Sharp's Twin Famicom of 1986, which in Osaka today is in abundant supply – these go for around Y12,000 unboxed and a bit more if you want a complete package. The Twin Famicom presents both a cartridge slot and a disk drive, in one red or black (the choice can be yours) Xbox-dwarfing system. In some regard, that must be impressive. As with the original Famicom hardware, however, the native signal output is NTSC RF.

›Pocket gaming

What's in our jacket pocket this month? See: a WonderSwan!

Bandai's portable game system in its most recent configuration (the gloriously colourful WonderSwan Crystal) continues to sell in Japan – nearly 8,000 new units were bought last year. Not bad for a format which debuted at the beginning of 1999 and was officially withdrawn some time ago. The WonderSwan, as befits its strange monicker, is bizarre in form. It can be held vertically or horizontally, with games making use of these two setups according to which is most conducive to good play.

Gunpey is our favourite WonderSwan title. It was designed by Gunpei Yokoi after the Game Boy and Metroid creator resigned from NCL to establish his own outfit, Koto Company, in 1996. The game is the WonderSwan's essential puzzler, just as Tetris is for the original GameBoy and Columns is for the Game Gear. In Gunpey diagonally drawn lines on square tiles must be matched to form complete zigzag patterns which then wipe that screen section clean. Play it for long enough and you'll see diagonal lines on the insides of your eyelids. That's a good sign, we think, and this is a game that is well worth buying a WonderSwan for (especially considering the basic hardware sells here for under a fiver). It's fitting that this fine game bore Yokoi-san's name as it was his last product before his tragic death in 1997.

Other notable games come from Square in the form of Final Fantasy remakes, and these are designed for play on the WonderSwan Color. The successor to Bandai's original monochrome model is more expensive but with a much greater range of software. The difference is similar to that seen between SNK's Neo Geo Pocket and the NGP Colour – go for the WonderSwan Color unless you want to splash out on the better-yet WonderSwan Crystal. Either way, there is backwards compatibility among Bandai's portables, ensuring that, at whichever point you jump on the trundling bandwagon, you'll be able to find a space.

eMag

Desert Island Disks

Retro Gamer tracks down and chats to another gaming luminary. This month's castaway is Jamie Fenton, author of GORF and team leader on the Bally Arcade console project

It's not every castaway that can talk with equal eloquence about both the internal architecture of the Fairchild F8 chip circa 1976 and acid-fuelled trips into their own gender identity. But then not every castaway started out as Jay Fenton, who produced the arcade classic Gorf, and later became Jamie Fenton, a disconcertingly attractive, self-confessed 'disco dolly.'

"Actually," Jamie points out, "I sometimes say that transgender programmers are as common in the videogame industry as gay men are in the floral industry." I stand corrected. Jamie's story has a habit of surprising you, and it's a tale that begins right at the dawn of gaming history.

Tentative steps

Born in 1954 in New Brunswick, New Jersey, Jamie's schooldays did involve a spell in Wyoming, Ohio, where in 1970 she learnt a little BASIC and produced her first game, a version of the dice game Craps.

"Before that, around 1968, my dad had taught me how a computer works and I'd written some programmes in FORTRAN. He'd take them to his office – he worked as an analytical chemist for Procter and Gamble – punch them in, run them and bring home the results. It was just simple maths calculations and he may have corrected any syntax errors, but hey, I was only 14."

Her interest in new technology naturally led to her taking a degree in engineering at the University of Wisconsin, but she had initially tried to enrol on a film course, and her love of the arts meant she also took a Theatre class alongside her main subject.

"I produced an animation program on a PDP-8 and rolled the computer across campus to show the people in the theatre class. I got into the idea of combining the two things I was into pretty early."

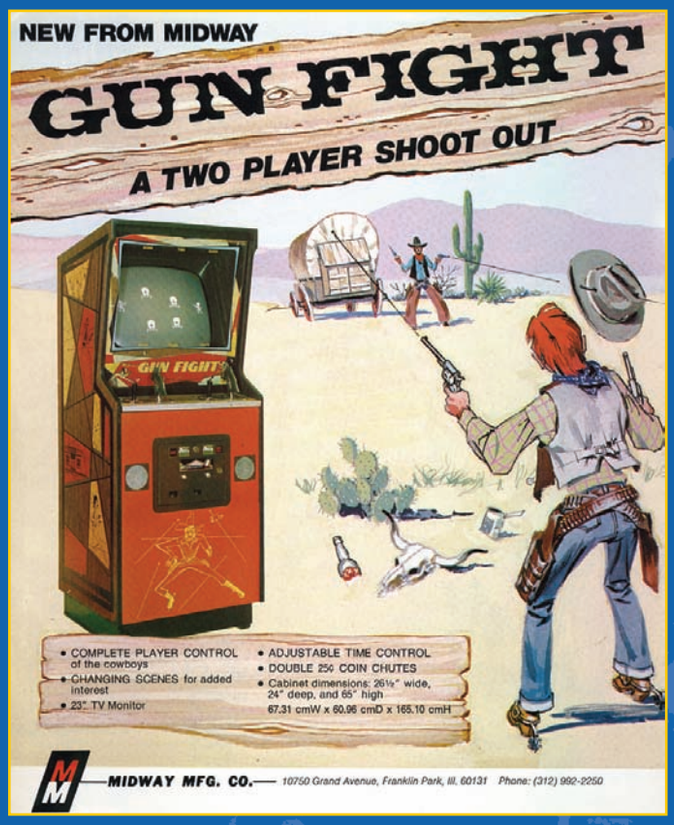
Of course, videogames were a logical way to fuse those two passions. Jamie had played Lunar Lander on a DEC minicomputer and also the daddy of the whole industry, Space War, at the Stanford AI laboratory in 1973. The latter had been converted into 'Computer Space' by Nutting Associates, which became the first commercial arcade machine, so it was again logical to approach a certain David Nutting in 1975.

"David Nutting Associates (DNA) hired two people – one to

do videogames and one to do pinball. Unfortunately, I got pinball. When I started there, I had silly ideas that pinball machines were controlled by the Mafia, so I wasn't that happy. I got to love pinball soon enough, but really wanted to be a videogames programmer, so while I was working on the Fireball table, I built this computer Blackjack game."

Pinball wizard

The Fireball table, released in 1976, was aimed at the home market, prompted by the massive boom in pinball's popularity thanks to the film Tommy. It was a clever idea, as whilst home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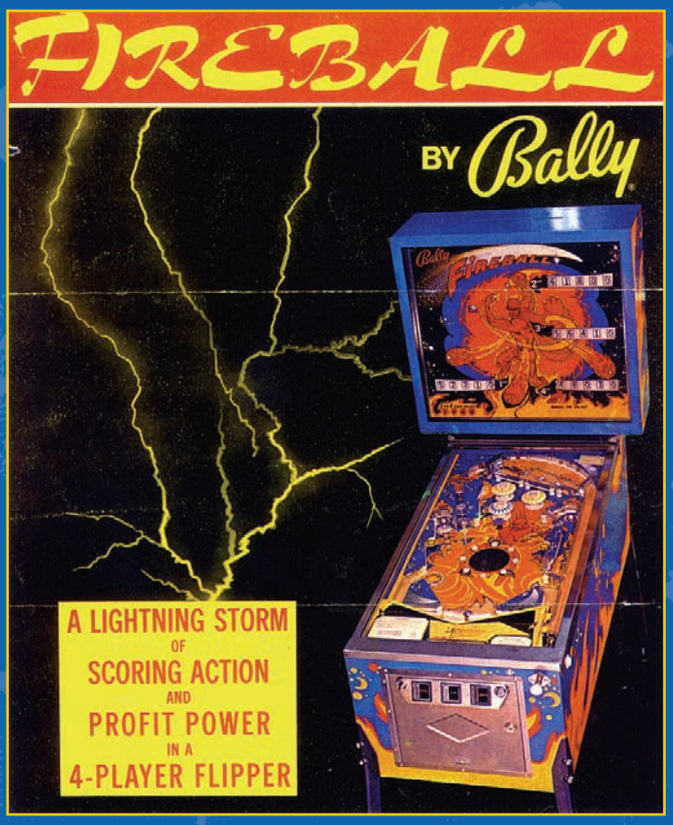
Film trivia time – Gun Fight was one of several games featured in the original Dawn of the Dead movie



The Fireball pinball machine featured a unique spinning disc in the centre of the table that fired the ball in random directions

tables had been produced before, they were usually scaled down versions, whereas this was full-size. Unfortunately, a wave of new commercial machines meant that many of the older mechanical pinball tables ended up being bought cheaply by individuals for home use.

"It wasn't a runaway success, but sold well enough so you still occasionally see them... There's even one in the Thelma and Louise movie."

subsequent games, whereby the gameplay was encoded in something that looked like a pseudo-assembler language, so a) you could store it more compactly and b) you could de-couple the scripting of animation and behaviours from the actual coding. The goal was that the artist, in this case Dave Nutting, could adjust the game without having to torment me. It's pretty much in every game now. We demonstrated it to a rep from the

which we'd just got the patents on. We knew it could make a good personal computer – the PC revolution was going on then and you had the Altair S100 Bus and stuff. This was a chance to make a cheap home computer. We were kicking round the idea at the time of Gun Fight and when we moved to Chicago after Seawolf came out in 1976, we got going on the Bally Arcade in earnest."

The project, headed up by Jamie, took a year and a half of

how lame a chip it was. Just to get a game out of it was a feat of engineering, but we knew it had limited ability."

The grandly titled Bally Professional Arcade was determined not to be similarly restricted. Its ambitious attempt to launch a two-pronged attack on the emerging games console *and* personal computer markets may be seen as foolhardy in retrospect, but this was the era of pioneers. Early adverts for the machine promised a printer and modem, and whilst neither ever appeared, Jamie reveals prototypes for both were actually produced.

"We went through a number of iterations of add-on devices that could be attached to the Arcade, but we gave up when the rest of the world caught up with what we were doing – like your ZX80! But for a while, we were way ahead in terms of games and personal computing."

"It was like being a rock star, but all the groupies were guys... that wouldn't be a problem for me now, but back then it wasn't very appealing" – Jamie on Bally Arcade enthusiasts

The more successful of the twin projects was to be the videogame Gun Fight (also known as Boot Hill), released through Bally, who employed DNA as its design team. That project had been handled by Tom McHugh but given her interest in the field, I can't help wondering if Jamie did get involved?

"It was Tom's game, but yeah, I did a little coding and architecture. I came up with a Virtual Machine architecture, used in the Fireball table and many

Rockwell company and he went out and filed a patent on it and then tried to sue Bally... I had to testify as an expert witness that he'd stolen the idea from me. My court fees were double what I earned inventing the thing in the first place!"

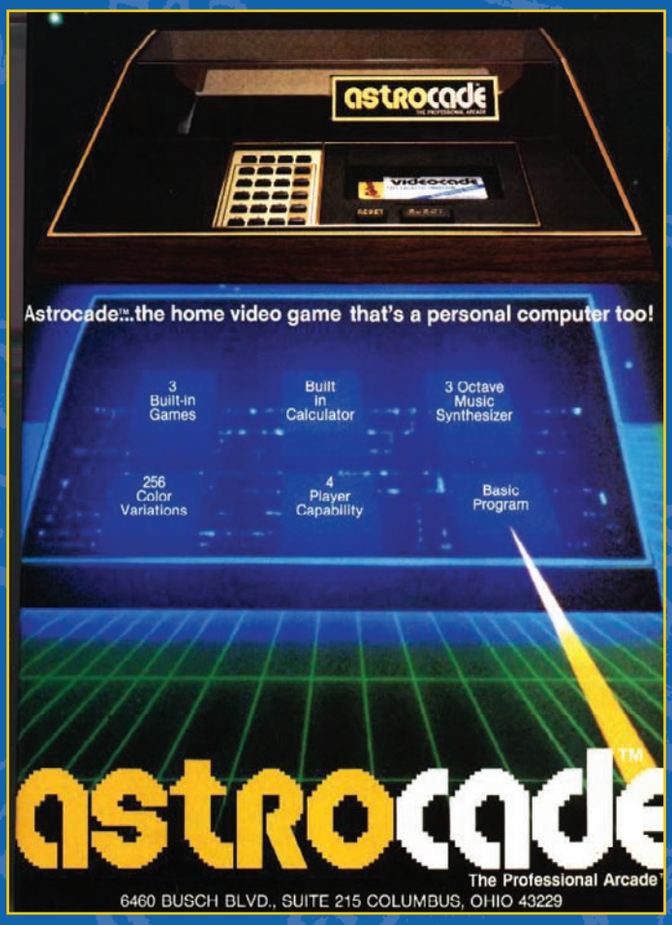
Bally won the case and also learnt the importance of ensuring any future innovations had legal protection. "Pong games were all the rage and we had this cool idea for doing a frame buffer connected to a microprocessor,

programming and chip design to reach fruition, the team working on custom chips to try and keep the retail price as low as possible. This meant the console was beaten to market by the Fairchild Channel F, the first to use interchangeable cartridges. Were the team worried their fire had been stolen?

"Yeah, it came out the year before us in '76, but it didn't take us long to realise what a simple device it was. I'd used its processor in Fireball and knew

Bally up

The Bally Arcade didn't corner the PC market, nor did it triumph in the field of games consoles, primarily due to the all-conquering Atari VCS. Jamie puts



Despite being dropped, the Bally Arcade lived on into the 1980s as the Astrocade, thanks in no small part to Jamie's version of BASIC

this down to a price point $100 lower and some clever marketing. "Atari's trick was including all the game variations on a cartridge – Pong with different size bats and calling that a different game. It was like saying how many transistors were in your radio. Plus we had reliability problems because a bunch of management weren't involved in making it – it was just us – and didn't buy into it, so wanted it to fail to make us look bad rather than fix it. For about a year the company was at war with itself."

The history of the Bally Arcade was indeed troubled, with Bally dropping the console in 1979, but remarkably the rights to the console were bought up by a group of users through a start-up company called Astrovision. It was re-launched as the Astrocade and was sold until 1985, boasting a huge range of homebrew software (and a bizarre cameo in Chevy Chase's National Lampoon's Vacation). The strong grassroots support was no doubt due to the BASIC programming language available for the console, developed by Jamie and based on an open source dialect called Tiny BASIC written by Li-Chen Wang.

"I'd got used to the drill that in the middle of every December, they'd pull me from whatever I was working on to do a demo for CES (Consumer Electronics Show). I used to hate doing CES demos – useless, throwaway programming. You're basically telling lies to people who tell lies for a living, right? That's how we looked at marketing people. So instead of a demo, I thought I'd invent a new product, to see if I could demo that instead of writing something that lied about using the Arcade for Home Security or to do your laundry or something."

Jamie took Tiny BASIC, added graphics commands and the ability to enter code via the console's keypad and had the whole thing done three days before the show. "And they *still* made me do a demo after that!'

The whole project took less than a week, but had a lasting legacy. Bob Fabris began a newsletter called the Arcadian, which ran from 1978 to 1986, publishing tutorials and reader's program listings alongside news and rumours, and became the focus for Bally Arcade enthusiasts everywhere.

"I still have a file with all the newsletters they did. It was a real rush, like being Linus [Torvalds – the man behind Linux] now – the centre of a little cult with all these people who think the world of you. It was like being a rock star, but all the groupies were guys... that wouldn't be a problem for me now, but back then it wasn't very appealing."

Natural high

If the Bally Arcade remains Jamie's proudest achievement, it was her next project that is the best remembered. GORF premiered in arcades in 1980, the same week as Pac-Man, and actually took twice as much money in those first seven days. Jamie describes the thrill of lurking in the background and watching players smiling and pumping quarters into the machine as "better than any drug I've ever taken". The game boasted a number of firsts – it had distinct levels, incorporated licensed versions of other games (Space Invaders and Galaxian) and level five featured a mothership, which had to be destroyed by hitting the exhaust port.

"Yeah, that came from Star Wars. I'm probably the least original videogame designer that ever lived! In fact, the whole thing started as a Paramount license for a Star Trek game to tie-in with the first film. We did have drawings of the Starship Enterprise in various states of rotation, but we looked at the whole movie script and came to the conclusion it wouldn't make a great game, so we decided to make our own. We had the rights to Invaders and Galaxian and spun out the other three missions ourselves."

As someone who still hears the phrase "Bad move, Space Cadet" in my head whenever I screw something up, I'm particularly interested in the speech chip included in the machine that would hurl insults at the player's paltry efforts.

"The chip was from the Bally Arcade days when we'd investigated various multimedia capabilities and we thought including it would be interesting. Sometimes the program would go wrong and pull stuff from random memory and you'd get [Jamie does a convincing and rather disturbing impression of a paralytic Dalek] which I thought was really cool and I wanted to keep in. We did consider wandering off into the blue end of the spectrum, but I've never put an Easter Egg in any of my games. I did have my answerphone message in GORF-speak for a while, though."

The huge success of GORF (the title, trivia fans, an amalgam of Jamie's college nickname 'frog' backwards, and an early David Nutting rifle game, which had a target that hopped around in much the same manner as the GORF character would do years later) was sadly not repeated by Jamie's next project, The Adventures of Robby Roto. Released in 1981, the unusual rescue game set in a striking finger-painted maze, was almost none of Jamie's design.

How good were you at GORF? Complete mission 25 and you'd reach the ultimate rank of 'Space Avenger'

"I wanted it to be a lot like Dig Dug. The idea was about digging underground at high speed, like an ant. An early concept had a GORF-like feel, where you started in an underground prison on a planet and you had this mole machine to tear your way to the surface past bad guys and stuff, and then you'd have a ship and fly off to another area. I thought the digging concept was good, but David wanted something like Pac-Man. Put those together and you get Robby Roto – excavating mazes. I think it felt like there were a couple of different ideas going on at the same time."

More GORF

The game didn't do well, and so Jamie understandably returns to safer territory and starts work on the sequel to GORF. With a working title of Ms. GORF, the game took the premise of how a female alien might behave.

"The Alien movie took that idea up, though I was working on the game before I saw it – for a change! GORF ships would enter a machine and get duplicated – one would fly in and two would fly out – and that was the Gorfian reproductive system. You were in orbit and could see the planet's surface below, with oceans and continents scrolling by. You could blast with various weapons and you had the Robotron set-up of two joysticks, so you could shoot at a really high rate, but they'd do the same back. If you held down fire, you could paint in shielding and the enemies could do the same, which you could blast holes in. It meant you could dynamically modify the playfield while playing."

Produced using what Jamie describes as an 'exotic development system', which involved dual processors, (one dealing with graphics, the other with game objects), shared memory, custom arrays, hardware bit-blipping and all written in a dialect of FORTH called TERSE, the project was complete to the point of play-testing, before tragically being cancelled during the great videogame crash in 1983.

It was to be Jamie's final direct involvement in the games industry. Since then, she has been involved in numerous IT projects, many, such as MacroMedia Director and MegaloMedia Photo Album for the Apple Mac, revisiting her early interest in digital imaging. She would love to return to the games industry, but worries she simply isn't up to speed on current development technology.

"I doubt anyone would give me the time of day. I love games, particularly the massive multiplayer online games, which I've been thinking about since 1976 and I'd love to do Ms. GORF, maybe for cellphones. But I think some people in the games community would be a little bit troubled about who I've become. The dirty truth is there's a huge number of transvestites in the industry that haven't come out yet and would have anxiety about being associated with me, in case people might think they're one."

'Jay' Fenton at work designing the arcade classic GORF

With an obvious nod to Pac-Man, Robby Roto failed to repeat the success of GORF

Ms. Fenton

Jamie completed her gender transition in the late nineties, but this was of course after a very long journey. I wonder whether Ms. GORF was even an indication of an evolving gender identity?

"Oh no," she laughs, "that was in response to Ms. Pac-Man. Back then I was doing rather masculine things like paint-balling. But I suppose at 11 or 12, I knew it was going on, but there wasn't a word for it. There was a lot of suppression of that kind of thing back then and after you got beat up a few times, you learned how to avoid bullies and not leak information that makes people want to beat you up. So you wind up pretending it isn't happening. That took me to my mid-twenties, but then I had this friend who had this great farm out in the woods. We'd go there and take LSD and I'd have this feeling there was this woman inside me somewhere. I'd dress up as a girl at Halloween and think 'Woah, people can tell I'm enjoying this!'... I'd feel so ashamed."

Jamie explains that while there is still prejudice, most people have been really supportive, including all but one person who knew him as Jay at Bally. "Most people are pleased to see I'm fine, I'm settling down and getting my act together. I was pretty wild back then. I'm pretty wild now, but in a different way – more sex, less drugs."

She set up the Transgender Forum in 1996, as a virtual community for transgendered people, and it's clear that community is something Jamie feels very strongly about. She is also an active member of the retro gaming scene, having made Robby Roto freely available through MAME – a project she wholeheartedly approves of – and has spoken at numerous Classic Gaming Expo events in the States. She admits to being something of an Anglophile, having visited our little island half a dozen times and especially loves London nightlife, so I tentatively ask if she might consider speaking at a future CGE UK?

"Oh, definitely. I'd love to visit again or even live in London. Sure, I'll speak if you'll have me. And anyway, I've got this thing for British guys..."

›Jaime Fenton's Desert Island Disks

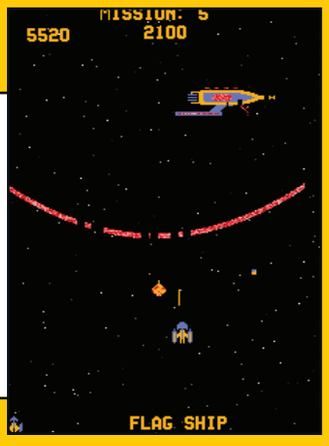
Gun Fight

Bally, 1975

The first game I really loved. It was a two player shooting game, so I guess I'd need to train a monkey. There were cacti and wagons, which the bullets could blow away. It's got a good story – it was the first videogame to be banned in the City of Chicago where it was made. It was thought to be sacrilegious, because when you died, you turned into a cross and went into the sky...

GORF

Bally, 1981



I'd want to take at least one of the space games like Galaxian or Invaders, so by taking this, I get five of them. Is that cheating? It's not like I think it's an all-time classic, but it lets me get away with only using up one choice.

Defender

Williams, 1980

I want to give a bow to the best game designer in Chicago – Eugene Jarvis. It came out a little bit after GORF, but pretty much defined the whole space game genre. I've met him a few times, though I don't know him well. I know a lot of good stories about him though... I've partied with him.

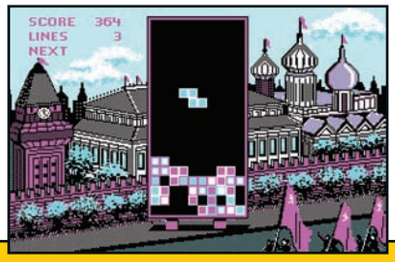
Robotron 2084

Williams, 1982

Another tribute to Eugene. I did rip-off the dual joystick idea for Ms. GORF. They gave this game such enormous firepower – all those moving sprites to shoot. The game everyone loved just before the crash. It was like 'the fad' was over, and I ended up moving on.

Tetris

Alexey Pajitnov, 1986



I'd consider it the last great 'classic' game. An enduring monument that everyone has to have. Steve Wosniak still sits and plays it for hours. If I had an idea as simple as Tetris, I'd drop everything and start coding immediately. I'd stop sleeping till I had it working.

Doom

id Software, 1993

I'd have to take a first-person shooter. Castle Wolfenstein was great and maybe I should take one of the more up to date ones for the complexity, but no, Doom defined the genre. It's the ultimate outcome of what GORF and Gun Fight were intending to be, that is, "here you are, a combatant, and you have to survive." I find 2D games more compelling, but hey, I'm a gaming dinosaur, and this is still something I'd want to have.

The Sims

Maxis, 2000

A game close to my heart. The whole simulation genre I like, Sim City being the start. A great breakthrough game and I can try out male characters and female characters – it's fun. I actually met my wife in a chatroom, when I was pretending to be a woman and she was pretending to be a man pretending to be a woman.

Habitat

Lucasfilm, 1986

I'd want one of the MMO games, but I've not played that many, so I'm going to go back to the first. I don't think you can play it now but it was the classic of the genre. Done by Chip Morningstar, Randy Farmer and Doug Crockford – I worked for these guys at Electric Communities. They created the word 'avatar' and the whole concept of an online identity, being able to trade and fight – the whole social aspect. They hacked out all these modern notions out of nothingness and any group of guys who manage to be way ahead of their time and still make no money, I can relate to.

eMag

SuperSystem

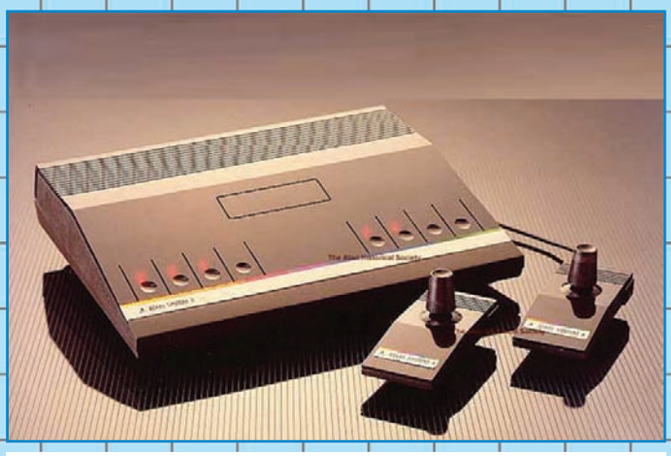
The 2600 console had made Atari a household name, but by 1982 the system was getting old and facing strong competition in the marketplace it had created. Rival systems such as Mattel's Intellivision were well ahead of the 2600 from a technical point of view and an increasing number of people were becoming interested in this more advanced machine. It was time for Atari to find a successor to the 2600, but could it repeat the winning formula? Peter Latimer looks back at the so-called SuperSystem

Consoles had never been seen as long-term investments by Atari. Back in 1978, long before the 2600 reached its peak, plans for a new console had already been set in motion. Several of the same engineers who had been involved with the original 2600 design were working on a machine whose graphics and sound would take gaming into its next generation. This was the design which eventually became the Atari 5200 and had it been completed then, Atari would have had a games machine that nobody could compete with. However, Ray Kassar, who had been put in charge by Atari's new owners, Warner, had other ideas. He saw no immediate need to replace the 2600 which at that stage was no great success story. He claimed the future was in home computers and saw an opportunity for Atari to enter that emerging market in direct competition with Apple. The powerful new chipset which had been destined for Atari's 2600 successor was turned over to the brand new home computer division and instead formed the basis of the Atari 400/800 computers. This allowed other video game companies to get a step ahead of Atari by introducing their own 2600 beaters unchallenged.

Meanwhile, Atari's engineers were forced to come up with alternative successors to the 2600. One idea was the Atari 2700 – it would keep tried-and-tested VCS hardware at its core but introduce a new look and come equipped withwireless controllers as its main selling point. However, when testing revealed that the new controllers were as likely to open the garage door as annihilate the aliens, the console was dropped.

And then came Project Sylvia, also known as Super-Stella and the Atari 3200. It retained compatibility with the 2600 while offering new possibilities through enhanced sound, graphics and an improved 10-bit processor. It also looked a lot like sandwich toaster, but that's not what killed it. When game designers were presented with the new machine to begin experimental development they found it was simply too difficult to program – and remember, these people were accustomed to 2600 development which as good as required them to program the TV's electron beam directly! The machine was scrapped, meaning Atari still had nothing but its ageing 2600 as its main product in the escalating console war. With the Intellivision growing stronger and other new consoles appearing on the market, a new machine was needed quickly, or Atari would risk being left behind altogether.

There wasn't enough time to start again from scratch, so Atari returned to that original 1979 plan. Just because it had been used in a home computer didn't mean it couldn't now be used as the basis for a console – after all, despite being three-years-old, the technology was still far ahead of the Intellivision. A project was quickly set in motion to harness the power which had made Atari's computers the best in their class and use it to create a brand new console: Project Pam. Atari had a history of naming projects after female members of staff, but as this one provided a convenient acronym for 'Personal Arcade Machine' it came much closer than any other to being officially adopted. Instead though, the new console was introduced to the world at the CES during summer 1982 under the slightly vague name 'Atari Video System X'.



The Atari 3200, or Super-Stella, proved too difficult to program and plans were quickly scrapped

A prototype Atari 2700 with its less-than-reliable wireless controllers

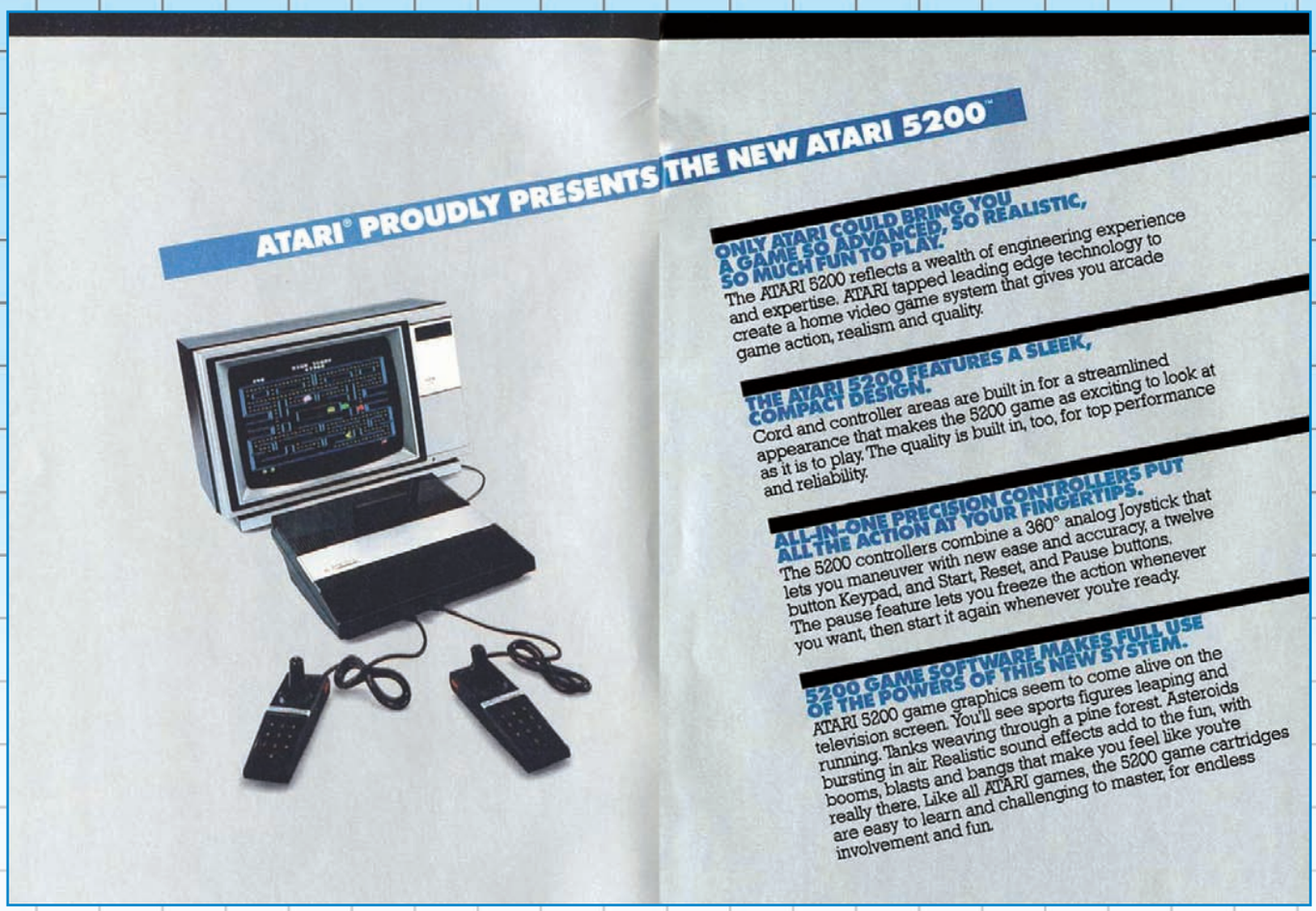
The console was announced not as a direct replacement for the 2600, but as a superior system for the more discerning gamer. It certainly came with a superior price tag – while Coleco's new 'next generation' console debuted at $175, Atari's initial price was a fairly staggering $299. After the CES, everything seemed to go quiet and rumours began to circulate that the console had been scrapped. But then, during October and with no fanfare at all, the new machine, now officially named 'Atari 5200', began to sneak into stores. The slow rollout meant it didn't make it to the key east coast US market until late November, almost missing the Christmas season altogether. Still, none of that was important. All that mattered was that the biggest name in the business was back with a brand new console – and that alone was enough to ensure Atari's continued presence at the forefront of gaming. At least, that's what it'd been hoping.

The next big thing

A quick glance at the 5200's hardware specifications shows that it was a huge step up from the 2600. It had more memory, a better processor, a proper sound chip, superior graphics and all manner of other things. But Atari didn't believe that talk of things like POKEY sound and ANTIC graphics would mean a thing to the man in the street. If the average gamer was to believe that this new machine was better, then it would have to be bigger. And the 5200 was certainly big. With a surface area of 16in x 13in, and a similar overall volume to an Xbox, Atari had created a console whose size was an order of magnitude larger than the hardware inside it required – big enough even to include internal storage compartments for two controllers and the RF cable. It applied the same logic to the games. 5200 games could have been housed in the same style of cartridge as had been used with the 2600, but Atari needed to be sure that the public would believe the new games were better. And, it thought, the only way to do this was by making them bigger. Much bigger – the new breed of cartridges were almost double the size of their 2600 cousins.

The 5200 was also the public's first introduction to the 'black wedge with silver stripe' look which had been introduced for the aborted 2700 console and would later be the basis for a revamped 2600 and the Atari 7800. Alongside that striking new look and more powerful hardware were a number of other interesting innovations, including revolutionary new controllers. Mattel had gone to great lengths to ensure people knew its Intellivision controllers offered a whopping 16 different directions while 2600 controllers only managed eight, so Atari went one better – infinite! The 5200 came with two genuinely analogue controllers which were sensitive to both the full 360 degrees of motion and the speed the stick was moved at. Additionally, they included a 12 button keypad and two different fire buttons. All this would allow games designers to implement suitable control systems for the much deeper games the 5200 was going to offer. To top it all off, the controllers also featured a pause button (which had never been seen before, but has been a standard feature of almost every decent controller since), a start button and a reset button. Admittedly, the joystick cables were so short that the console itself was never likely to be out of reach while playing, but it's the thought that counts.

The first 5200s to roll off the production line featured two further innovations, both of which were dropped from later models – the ability to support four controllers at the same time and a unique TV switch box. Hailed by some magazines at the time as 'marvellous', the switch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The ATARI 5200 reflects a wealth of engineering experience and expertise. ATARI tapped leading edge technology to create a home video game system that gives you arcade game action, realism and quality.
THE ATARI 5200 FEATURES A SLEEK, COMPACT DESIGN.
Cord and controller areas are built in for a streamlined appearance that makes the 5200 game as exciting to look at as it is to play. The quality is built in, too, for top performance and reliability.
ALL-IN-ONE PRECISION CONTROLLERS PUT ALL THE ACTION AT YOUR FINGERTIPS.
The 5200 controllers combine a 360° analog joystick that lets you maneuver with new ease and accuracy, a twelve button Keypad, and Start, Reset, and Pause buttons. The pause feature lets you freeze the action whenever you want, then start it again whenever you're ready.
5200 GAME SOFTWARE MAKES FULL USE OF THE POWERS OF THIS NEW SYSTEM.
ATARI 5200 game graphics seem to come alive on the television screen. You'll see sports figures leaping and running. Tanks weaving through a pine forest. Asteroids bursting in air. Realistic sound effects add to the fun, with booms, blasts and bangs that make you feel like you're really there. Like all ATARI games, the 5200 game cartridges are easy to learn and challenging to master, for endless involvement and fun.

The number 5200 was significant, indicating that the console was twice as powerful as the 2600

The infamous Atari 5200 controllers. Packed with innovations, but an absolute nightmare to use

box promised to end two tortures faced by all console owners – having to flick a switch to change from regular viewing to games playing, and the unpleasant sight and sound of static while the console's power is turned off to change games. By connecting both the power supply and RF cable to the switch box, the TV could be made to switch over to the 5200's signal simply by powering up the console. And instead of static when the console was turned off, players were now greeted by a much more civilised blank screen. As an extra bonus, this system also reduced the number of leads going to the console.

An enhanced version of the 2600 classic Super Breakout completed the package, giving Atari a sleek, innovative machine which seemed to have everything needed to guarantee Atari's dominance in video gaming. In fact, the only way the 5200 could have failed was if everything conceivable went wrong – which, for the most part, is pretty much what happened.

Teething troubles

Initial sales were modest, prompting Atari to expand the console's name to 'Atari 5200 SuperSystem' in case people hadn't quite got the message. Perhaps the first effects of what would become known as the great videogame crash were already being felt, but there is little doubt that Atari made plenty of errors all by itself.

One of the biggest was those revolutionary controllers. They had sounded so good on paper, but most people who used them came to regard them as one of worst pieces of gaming hardware ever created. They had three major flaws – they were entirely unreliable, the sticks did not self-centre, and the '360 degrees of freedom' concept simply didn't lend itself to some of the era's most popular games which required precise 'up, down, left, right' movements. While the stick's unique features were well exploited by titles created specifically for the 5200, they were a huge disadvantage in the majority of conversions from 2600 games – which constituted the system's entire library at launch time. The 5200's first game was intended to be an

THE 5200 SuperSystem
ATARI 5200 CONSOLE
VCS CARTRIDGE ADAPTER
ADVANCED CONTROLLER
TRAK-BALL CONTROLLER
The 5200 SuperSystem centers around the world's most advanced home video game console.

Following slow sales, the subtitle 'SuperSystem' was added and the long-overdue VCS Cartridge Adapter was rushed to market

Technically speaking...

For the most part the Atari 5200 used exactly the same architecture as Atari's 400/800 computers, which means it ran an 8-bit 6502C processor at 1.78 MHz, came with 16Kb RAM on-board, had four channel sound and could display 16 simultaneous colours as standard from a palette of 256, all in a resolution of 320x192.

5200 programmer Ron Lloyd took time out to tell us about the more interesting technical features of the systems. Clearly those same engineers who had given us the 2600 hadn't run out of ideas just yet.

- **The hardware might date back to 1979 but with a little know-how can be made to display its full 256 colours at once. Well over a decade later, the Sega Mega Drive was still only offering 64 as standard!**
- **The 5200 soundchip, known as POKEY, was well ahead of its time – hearing clear speech in games without needing a special adaptor was quite something back then.**
- **Unlike its chief rival, the Colecovision, it's clear that the 5200's components were designed for gaming from day one. It has collision detection built into the hardware, freeing up valuable processing time. In fact the whole graphics system is built round the concept of players and missiles.**
- **Programmers could use a concept called 'display lists' which allowed each part of the screen to be drawn in a different graphics mode, allowing programmers to avoid wasting time on parts of the screen where the more complex modes just weren't needed.**
- **A 5200 game could easily run at 60fps – allowing unrivalled smoothness.**

It wasn't all a programmer's paradise though. As with most systems of the era, programmers still had to think very creatively to work around the restrictions. For example, the 5200 was limited to just four main sprites and four little 'missile' sprites. It also allowed only four or five different background colours. If developers wanted to beat those limitations, they needed to program right down to the metal, creating tight and efficient engines which changed colours and reused sprites on a scanline by scanline basis. Still, programming the Atari 5200 represented a significant step forward for developers who were used to creating a miracle for every new thing they wished the 2600 to do.

>5200 add-ons

Although the 5200 led a short and troubled commercial life, there were still a number of add-ons created for it, with perhaps the most interesting being 'Project Puffer'. We can only assume that the tradition of naming projects after ladies associated with Atari had ended by this time.

Project Puffer

Video games have always been a useful scapegoat for blaming falling fitness levels on. Although a few abortive attempts had been made in the past, the Atari Puffer was perhaps the first serious attempt at marrying video games with their nemesis – exercise. Atari believed that by making gaming a physical pastime they could reach a whole new range of people who wouldn't normally have the slightest interest in an Atari product.

The idea behind the Puffer was to build a set of games controllers around an exercise bike – controllers on the handle-bars and a magnet-based system on the wheels to monitor speed. With one simple connection to the 5200, your bike would then be plunged right into a videogame's action. Three Puffer games were created – River Boat, which saw you pedalling your boat around to rescue people, Pole Position, which saw you peddling your car in a high-speed grand prix, and Tumbleweeds, which saw you peddling for no good reason at all.

Unfortunately, when the Tramiel family took over at Atari, the project was cancelled. They obviously knew what we all know – if we cared about our bodies we wouldn't be sitting inside playing games.

Atari Joystick Coupler

This impressively-named device doubled the number of control possibilities available to the player in any given game – by sticking two joysticks together. It's not quite as pointless as it sounds since several Atari 5200 games (like Robotron 2084 and Space Dungeon) required the player to use two joysticks at once.

Trak-Ball

Some people believe this to be the finest controller ever created for any gaming system. At $75 it was an expensive, but superb quality product which replaced the poor 5200 controllers with a durable, high-precision trackball that made all the difference in games where accuracy of movement mattered.

Masterplay

The 5200's controllers were legendary in their awfulness. To make things worse, the joystick ports were unique to the 5200 so you couldn't just forget them and plug in your old 2600 joystick. Unless you had a Masterplay. Not only could you use your old 2600 stick, but you could simultaneously attach the regular 5200 stick, giving access to the 5200's keypad while using a more sensible style of joystick.

enhanced version of Asteroids, but the new style of joystick rendered it so unplayable that Atari never even released it! It's hard to know just how Atari got it so wrong, though perhaps it's reasonable to suspect that hiring a joystick designer who had never played a video game (or so legend has it) wasn't a particularly wise move.

Then there were the games. Being made by Atari gave the 5200 automatic rights to versions of the most popular arcade games ever made, which must have seemed like a huge asset. The problem was that they were all already available for the 2600. At launch time and for months afterwards, there wasn't a single release unique to the 5200. People came looking for the next exciting wave in home gaming and Atari gave them Space Invaders again. While many of the 5200 versions were very significant improvements over their 2600 counterparts, they were still the same old games at heart. People who were bored playing old titles like Centipede were being invited to stump up £300 so they could play, well, old titles like Centipede. And almost as if trying to confirm people's suspicions that the 5200 offered nothing new, the 5200's bundled game 'Super Breakout' was very possibly the least revamped revamp the gaming world has ever seen.

Other problems included a lack of marketing and development focus. Atari continued to put at least as much resource into the 2600 as the new machine, never allowing the 5200 any real time in the limelight. That revolutionary switch box was another problem – not only was it temperamental, but it was incompatible with many TV sets of the day and was dropped from later production runs of the 5200.

All these problems were significant, but perhaps the most damaging of all was that the 5200 was not backwards compatible with the 2600. Players who were ready to upgrade from the old machine gained no advantage from staying loyal to the brand. Atari had created a machine with huge potential but didn't seem to have taken enough time to properly think through its finer points. Even with all its faults the 5200 was still a big enough leap forward to fend off the Intellivision, as had been Atari's intention. But the competition had just become a whole lot tougher – a new opponent had entered the market who posed a much bigger threat.

Have you played Coleco today?

Coleco had dipped its toes into video games during the 70s and lost $22 million in the process, but had learnt from previous mistakes and was back. Its Colecovision console was technically impressive, beat the 5200 to the market and was considerably cheaper. It sold a million units almost immediately, partly due to its advanced gaming power, and partly because it came with the hottest new game, Nintendo's Donkey Kong, which Atari had no rights to. To make matters worse, the Colecovision was soon able to play Atari 2600 games via a special adaptor, something the 5200 couldn't offer. Not only was Coleco becoming the dominant force in the market which Atari had come to think of as its own, but it was providing the natural upgrade path to Atari 2600 owners.

Atari began to realise that things were not going according to plan and spent 1983 hitting back. It came up with an adaptor of its own to address the 2600 compatibility issue – though it wasn't compatible with the early four port 5200s. It started commissioning quality, original 5200 titles like Space Dungeon. It introduced the Atari Trakball controller which was one of the finest controllers ever created for any system, but at $75 was very much a luxury. It replaced Super Breakout with Pac-Man as the 5200's free game – not too original but it provided an excellent contrast to the abysmal 2600 version. It even began revising the standard 5200 controllers, which ended up going through a total of nine revisions during the 5200's short lifecycle. Atari had finally realised that it could no longer be complacent and was taking the

Competition came in the form of the Colecovision, no doubt boosted by the availability of a 2600 adapter

fight back to Coleco and Mattel.

With the release of more interesting games and the other steps Atari had taken, the 5200's future was looking brighter. The Colecovision was no longer outselling the 5200 and Atari was on the verge on correcting the final problems which had given the 5200 such a shaky start. The infamous controllers were about to be replaced by new, self-centring joysticks, and the cost of the console was about to be cut by the introduction of the Atari 5100 – the same machine in a smaller, cheaper form. European versions of the 5200 were prototyped in preparation for the long overdue full international launch. But the good times weren't to last. A disaster was on the way which would quickly bring an end not only to the Atari 5200, but to that whole era of video games.

Dying young

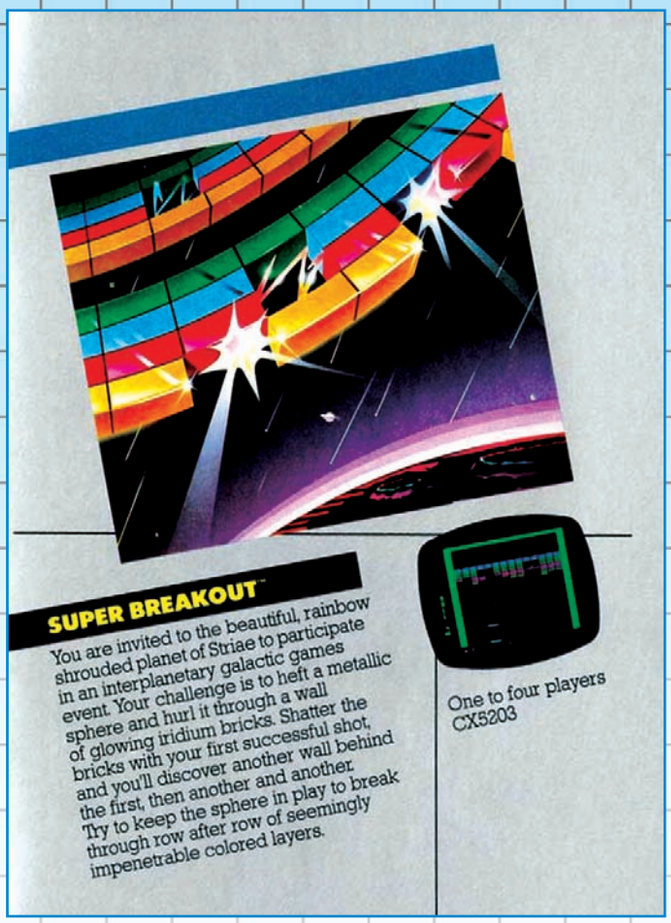
When video gaming reached its height in the early 80s, countless companies had tried to grab a slice of the cake. Unfortunately, not many had the slightest idea of how to produce a quality video game and by 1984 the games buying public found themselves being drowned by a slew of atrocious games. People simply stopped buying console games and instead looked towards the new breed of powerful, cheap and versatile home computers. The seemingly unstoppable videogame industry came crashing to a halt.

As the crash began to hit hard, both Coleco and Atari had to retreat. While the once successful 2600 was allowed to flounder on for years, the Atari 5200 was immediately, and permanently, discontinued. Although production wasn't officially halted until July 1984, no new 5200s were made after November 1983, a year which Atari ended by posting losses of $536 million. The 5200's international launches were cancelled, and game production was quickly scaled down during the remainder of 1984 (though a couple of titles were released as late as 1986). With a total commercial catalogue of well under 100 releases and a production run of not much more than a year, the 5200 never reached its full potential. It never even saw light-of-day outside North America. In Canada it had only appeared in the Ontario area. Atari Germany even ran an advert for the 600XL computer which asked people "Why pay 500DM for a toy when you buy a real computer for the same money and still play Donkey Kong?". The 'toy' it was referring to was an Atari 5200.

In many ways the Atari 5200 could have been a worthy successor to the 2600. It was stylish, powerful and had some of the best arcade conversions a console has ever seen. But a combination of complacency, design flaws, lack of focus and pure bad luck meant that by the time it was truly ready for the mass market, the mass market had gone.

To most people the follow-up to the most influential console of all time isn't much more than a quirky footnote in the history of gaming. But those who know it best know it to be one of the most unfairly overlooked console ever made. ››››

ASTEROIDS™
Trapped in space somewhere between the planets Ortanus and Earth, your ship is suddenly surrounded by a field of massive asteroids. And, as if that weren't enough excitement for one day, a group of alien saucers stage a surprise attack. Quickly you take over the controls to save your ship from imminent doom. You must thrust away from the path of the oncoming asteroids. Put up shields to protect the ship. Hyperspace into thin air. Flip over and get the asteroids attacking from behind. It's all in your hands now. Good luck!
One to four players
CX5201


SUPER BREAKOUT™
You are invited to the beautiful, rainbow shrouded planet of Striae to participate in an interplanetary galactic games event. Your challenge is to heft a metallic sphere and hurl it through a wall of glowing iridium bricks. Shatter the bricks with your first successful shot, and you'll discover another wall behind the first, then another and another. Try to keep the sphere in play to break through row after row of seemingly impenetrable colored layers.
One to four players
CX5203

Although advertised, Asteroids was never released, while Super Breakout suffered from being almost identical to the 2600 original

›Out with the old

The 5200 launched without a single original title. Every game had already appeared on the 2600 and although each one bad been revamped for the 5200's superior hardware, most people didn't believe it was offering much that they couldn't get from a 2600. Consequently, most people missed out on the opportunity to play some of the finest arcade conversions ever created.

Space Invaders

Without Space Invaders the Atari 2600 might have been a short-lived and quickly forgotten electronic toy. But instead, its superbly authentic recreation of this arcade sensation kick-started the whole home gaming industry. It should come as no surprise then that Atari chose to create a version for its new 5200 console. And what a version. From the crisp, smooth graphics to the enhanced gameplay, every single aspect has been improved upon. A classic conversion.

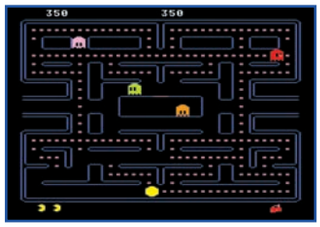
2600 Version

5200 Version

Pac-Man

The Atari 2600 version of Pac-Man brought an arcade legend right into the home, and ruined it completely. It's a flickery, clumsy, half-finished mess. Owners of the 5200, on the other hand, were treated to a superb game which was both true to the spirit and appearance of the original. The 5200 version deserves its place alongside the very best arcade to console conversions. And the 2600 version also deserves its place, alongside ET in the New Mexico desert where so many copies of this dire game are buried.

2600 Version



5200 Version

Jungle Hunt

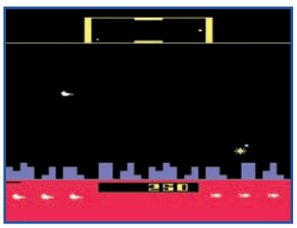
Right away it's clear that this is a vastly different game from the 2600 version. The difference in graphics is huge, with clarity, animation and detail replacing the blocky look of the 2600, but it's the gameplay that's changed most. The aim is the same, but on the 2600 you could have rescued the lady in less time than it took the board to revolve in Bullseye. On the 5200 though, each level is a tough new challenge. It lacks the immediate appeal of its 2600 cousin, but underneath lies a more challenging, interesting game.

2600 Version

5200 Version

Defender

Defender is an all-time arcade favourite which was done no justice at all by its 2600 version. It featured graphics that were shabby even by 2600 standards and really didn't look much like the original game at all. It's a far cry from the impressive 5200 version which stays true to the arcade in almost every aspect. The graphics are authentic, the sound is authentic and the more complex 5200 joysticks allow for full range of arcade controls to be replicated. A game that was best avoided on the 2600, but comes highly recommended on the 5200.



2600 Version

5200 Version

›InActivision

It's impossible to overstate how important Activision was in the video game industry of the early 80s. It proved that it was possible to make a hugely successful business purely from games software. It was the first company to treat game designing as an art rather than a purely technical skill. Perhaps most importantly, by creating games for the Atari 2600 of a quality which its designers could not have envisaged, it took gaming to new heights and forced the entire industry to raise its standards.

When the company announced that it would be publishing games for the 5200, just about everyone was dying to see what it would do with this new, more powerful hardware. However, while its games for the 2600 were astonishing, its games for the 5200 were... its games for the 2600.

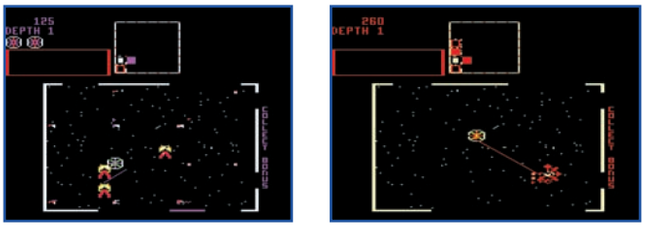
Kaboom! had been one of the most fun games available on the 2600. Utterly simple but fiendishly addictive, a genuine classic. It was no real surprise that Activision decided to create a version of Kaboom! for the 5200. What was surprising though is that the only significant enhancement was allowing a second player to take over the role of the mad bomber.

>In with the new

One of the criticisms directed at Atari during the 5200 era was that it relied far too much on porting existing 2600 titles. While that's certainly true, it doesn't mean that the 5200 had no good releases of its own. Here are four of the best:

Space Dungeon

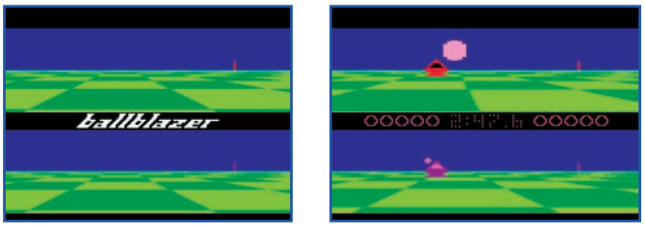
It doesn't look good. It doesn't sound good. But it plays like nothing else. Although simple, the game feels surprisingly deep. The object is to explore all rooms, find the treasure and find the exit. The use of two joysticks simultaneously adds an extra dimension, but it's the sense of suspense as you enter each new room which is key to Space Dungeon's success. It's useless at showing off your powerful 5200 to your friends but luckily, once you start playing, you won't need any friends.



Not the best looking 5200 game, but one of the most playable

Ballblazer

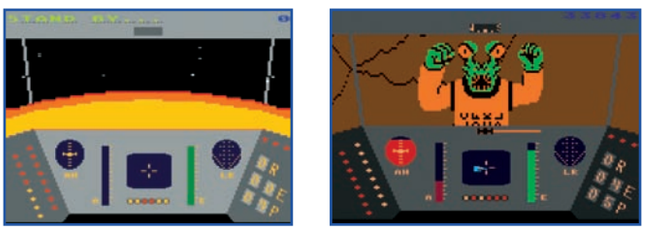
Lucasfilm's entry into video games caused great excitement among gamers – the guy behind Star Wars was going to make games! They can't have been disappointed with games like Ballblazer, a stunning, split-screen 3D sports game which sees each player simply trying to gain control of a ball and deposit it in their opponent's goal. Although Ballblazer was a good game in its own right, it's the incredibly slick presentation which really made this a game to remember.



Ballblazer was perhaps the best two player game on the console

Rescue On Fractalus

Lucasfilm again showed what a missed opportunity the Atari 5200 had been with another hugely impressive title that showcased the capabilities of the console. Part shooter, part adventure, it sees you scouring an amazing 3D landscape in a spaceship, searching for lost pilots. Like Ballblazer, this doesn't quite have the immediacy so often associated with 80s games, but it's highly playable and the presentation is immaculate. Easily one of the best games available for the system.



Lusasfilm was the only developer to really push the 5200

Gremlins

It's always good to let your pets out for a little exercise but it's best to keep an eye on them. Especially when food turns them into evil monsters, water causes them to multiply and daylight kills them. Each stage of this fun game sees you trying to place a number of 'Mogwai' back in their pen before they either turn into Gremlins or get killed by sunlight. There's nothing original in the gameplay, but its flawless execution and first rate graphics which make this well worth your time.

If only the Star Wars games on the 5200 had been as good as this

It's the same story from Pitfall through to River Raid. When Activision released a 5200 version of one of its existing games you could be pretty sure you'd get a good game, but equally sure that it would be no better than your old 2600 version. At least one conversion, Space Shuttle, even came in a box with 'Atari 2600' simply crossed out! Only with Megamania does the difference in the two versions appear to have been significant.

It's difficult to know what happened. Could it be Activision had done such wonders with the 2600 that there was no room left for improvement? Not really – its conversions of games like River Raid for the Colecovision during the same era went to great lengths to make use of the more advanced hardware, and the 5200 was at least as powerful. Could it be that its programmers had not been given time to learn the intricacies of the 5200? Or had it realised early on that the 5200 was never going to achieve long-term success and that any projects would need to be brought fruition quickly?

Whatever the reason, until Lucasfilm's games were released, nobody ever pushed the 5200 in quite the way that Activision had pushed the 2600. But by then, it was far too late.

5200 in 2005

Ron Lloyd is right at the forefront of keeping the 5200 SuperSystem alive in the 21st century. He talked to Retro Gamer about 5200 homebrewing and the projects he's been involved in

Koffi: Yellow Kopter was self-published by Ron and sold through sites like AtariAge.com

Retro Gamer: How did you become involved with 5200 programming?

Ron Lloyd: In the 80s it was my favourite system, but I eventually tired of it and gave it away to my cousins. I was into the Sega Genesis and Saturn during the 90s, but in 2000, when my dad passed away, I was around family that I hadn't seen in years. My cousin told me "I still have your Atari stuff, do you want it?". So I got back the 5200 that my dad had bought for me years ago. I then bought tons of games that I had always wanted as a kid – it was great medicine. After reminiscing with my old 5200 for most of that winter, I decided in spring of 2001 to begin researching how to make a 5200 game. I found a community at www.atariage.com and the rest is history.

RG: What was it like programming your first homebrew game, Koffi: Yellow Kopter?

RL: It was far more work than I could have guessed! I had begun to learn 5200 coding in June of 2001 and finally completed Koffi's coding in October 2002. I built 100 cartridges, put labels on them, made arrangements for boxes and manuals, took orders and shipped them out. I received orders from the USA, Canada, Germany, Poland, Japan, and Brazil! AtariAge has sold additional copies since then – it probably sold around 200 in total. I recouped my expenditures plus a little extra, but no homebrewer is in it for the money. Every email I got from excited retro gamers was my true reward.

RG: What do you think is the best 5200 homebrew title?

RL: I love the recent Castle Crisis homebrew. It's a fantastic effort, a superior port of arcade Warlords. And I must admit that I am proud of Koffi. I still play it now and then, even after all those hours programming it.

RG: Do you think the 5200 is a good machine for newcomers to retro programming to start on?

RL: The 2600 is the most supported console for homebrewing, but I personally believe there are only a handful of human beings who have the technical skills, disciplined mind and willpower to program a decent 2600 game. I find 5200 development more rewarding – it has screen RAM and many other features not found on the 2600, making coding more accessible.

RG: So where should a 5200-coder-in-waiting start?

RL: Start at this link: www.atariarchives.org. Read up about the Atari 8-bit computer hardware. Then go and read the programming forum at AtariAge and check out Dan Boris' 5200 homebrewing site at http://atarihq.com/danb/a5200.shtml. To make homebrews using a current Windows PC, you use an Assembler such as DASM, a word processor program for the code, and an emulator such as Atari800win.

RG: Finally, can you tell me a little about your current homebrew project?

RL: Quest for the Golden Chalice is an homage to Adventure and the Atari 2600. We called it Adventure II until recently, due to Atari's desire to protect its intellectual properties. The development started with discussions and some sketches, and then Keith, our graphic artist, started to translate the designs into 5200 screens and sprites. Alan Davis, the third team member, then devised a compression routine. If we didn't compress data, we might get 20 screens into the 32Kb memory. But compressed, we can get over 50. Alan and I first announced the project in 2001, but really didn't do much until spring 2003. And now it's 2005! I'm happy with the game, but I won't release it until I'm satisfied it's the best we can do.

To follow Ron's progress, visit
http://cafeman.www9.50megs.com/atari/5200dev

ATARI® 5200™
Super Software

SKILL & ACTION

COMING SOON

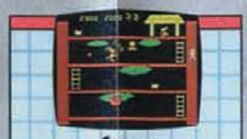
ARCADE ACTION
DIG DUG™

The subterranean pests, Pooka™ and Fygar,™ are after you! Become an underground hero and help Dig Dug burrow a maze and pump the bad guys until they explode! CX5211 (available summer '83)

COMING SOON

ARCADE ACTION
JUNGLE HUNT™

Horrors! Hungry cannibals have captured your fair maiden. To save her you must traverse treacherous jungle terrain, swim Reptile River, dodge cascading rocks and more! CX5222 (available summer '83)



ARCADE ACTION
KANGAROO™

Baby Kangaroo has been kidnapped by a band of apple-throwing monkeys. Mama Kangaroo is hopping mad! Can you help her dodge flying apples and punch out the monkeys? CX5229 (available summer '83)

ARCADE ACTION
CENTIPEDE™

Danger lurks behind every mushroom! Watch out for the pesky spider, stinging scorpion and mushroom-laying fleas as you zap the colorful centipede heading your way. CX5215

ARCADE ACTION
PAC-MAN™

PAC-MAN is home from the arcade and he's hungrier than ever! Race the voracious little guy around the maze to gobble up a world of dots, ghosts and tasty bonus treats! CX5208

SPACE

ARCADE ACTION
QIX™

Think quick! Draw Stix. But watch out for Super Sparx™ and crackling Fuses. The colorful QIX strikes like a bolt of lightning! Can you draw the line? CX5212

ARCADE ACTION
DEFENDER™

Kidnapping aliens are swarming over the planet. Can you save the helpless humanoids from capture? Use smart bombs sparingly and hyperspace only as a last resort! CX5218

ARCADE ACTION
GALAXIAN™

Wave after wave of fierce Galaxian warriors are descending upon the planet. Can you ward off the Galaxian invasion before it destroys your intergalactic command ship? CX5206

ARCADE ACTION
MISSILE COMMAND™

The invaders are blasting your cities and missile bases, leaving chaos and destruction everywhere. Protect your planet from the rain of bombs! CX5202

ARCADE ACTION
SPACE DUNGEON™

Surrounded by cosmic enemies, you cautiously explore the multi-tiered chambers in search of treasure. One false move and you're astral dust! With 99 exciting game levels! CX5232

RealSports™

ARCADE ACTION
SPACE INVADERS™

Attack! Counterattack! The bomb-dropping aliens are advancing. Will you be able to stop all the invaders before they land? CX5204

STAR RAIDERS™

Zylon warships are surrounding your starbases. Consult your galactic map. Hyperspace to Sector II. Shields up and lock on target. Good luck, STAR RAIDER! CX5205

ARCADE ACTION
VANGUARD™

Use your invincible "attack mode" and four-directional firing as you race through tunnel zones on your way to the City of Mystery. CX5216 (available spring '83)

BASEBALL

We've even got an umpire to call the action for realistic game play! You'll hear "SAFE," "OUT," "BALL" and "STRIKE" as you play ball! CX5209 (available spring '83)

SOCCER

Kick the bouncing soccer ball to outmaneuver your opponent and then loft the ball over the goalie. Enjoy all the strategy and gameplay of REAL soccer! CX5213 (available spring '83)

ADDITIONAL TITLES

FOOTBALL

Punting, kicking, realistic sounds, a full scoreboard, a scrolling 100-yard field and programmable plays make this the video game for REAL football fans! CX5207

TENNIS

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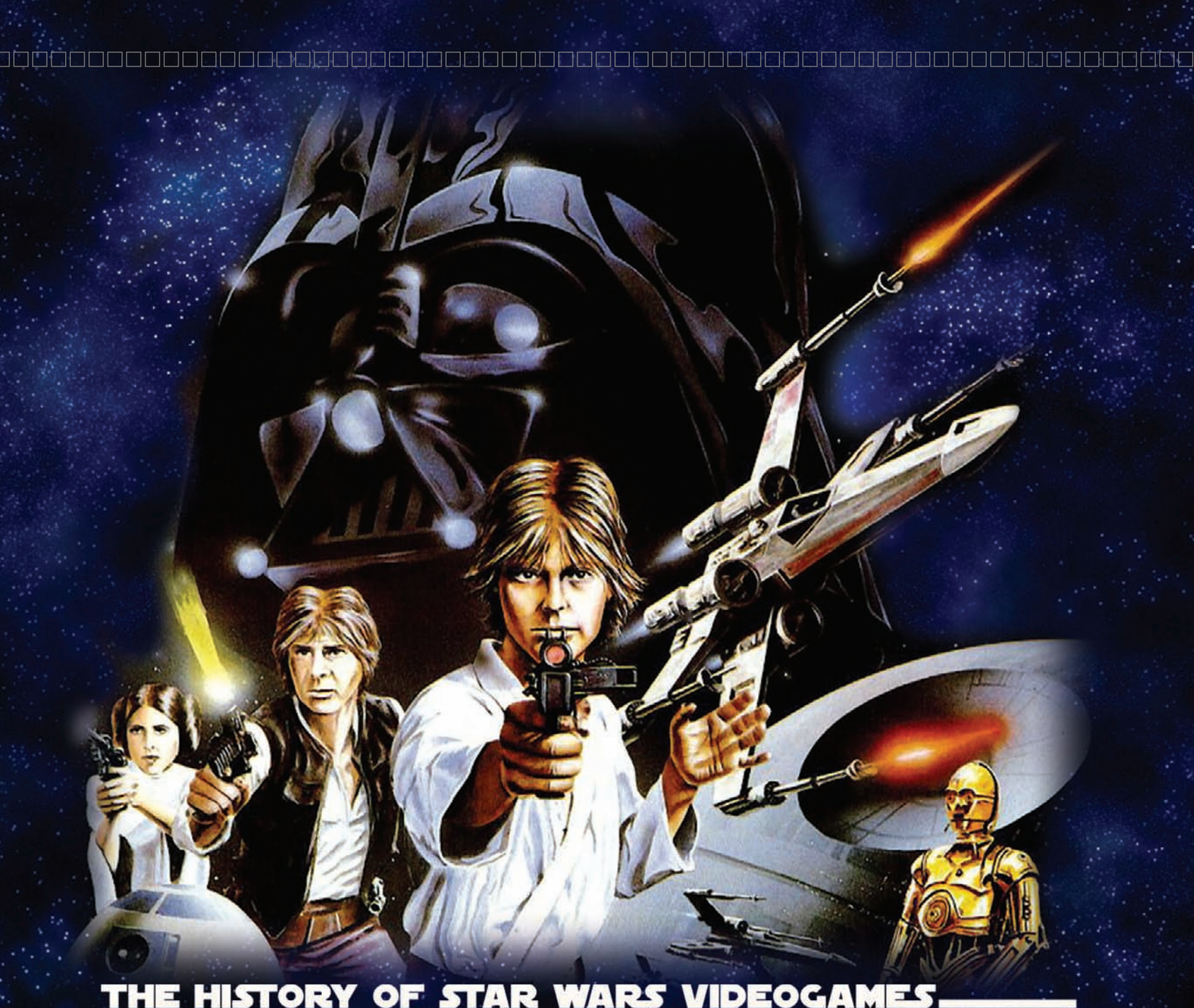


THE HISTORY OF STAR WARS VIDEOGAMES

EPISODE I

THE ATARIAN ASSAULT

The two Star Wars prequels may have dipped below our expectations, but the upcoming prospect of Episode III has us stupidly excited... so excited that we asked Star Wars uber-geek Dan Whitehead to chart the history of games based on the sci-fi saga. In the first of a three part series leading up to the release of the new movie, Dan looks at Atari's original arcade trilogy and the early computer and console licenses

A long time ago, in a galaxy far far away...

Well, OK, technically it was 28 years ago at Mann's Chinese Theater, Los Angeles. That was where, on May 25th 1977, a little sci-fi flick simply called Star Wars first revealed itself to mankind. Fledgling director George Lucas was so convinced that his "space opera" – which had cost the princely sum of ten million dollars – would be such a disaster that he went on holiday with pal Steven Spielberg to talk about making a movie about an adventurous archaeologist rather than face the inevitable bad news from the box office.

When he heard that people were queuing round the block to see Luke Skywalker take on Darth Vader over and over again, he flew back and watched in amazement from a burger bar across the street as movie history was made.

The arse end of the 70s and the early 80s were bookended by the further chapters in George's saga, The Empire Strikes Back and Return of the Jedi, with plain old Star Wars now rechristened as the more franchise-friendly Star Wars Episode IV: A New Hope, sparking speculation that one day we might see a whole new trilogy explaining just who Obi Wan was, what that fleeting reference to the "clone wars" was all about, and where all the Jedi vanished to.

On May 25th this year, that story will be completed, as Episode III: Revenge of the Sith brings the saga to a close, and we'll finally get to see perpetual whiner Anakin Skywalker burnt to a crisp, encased in black armour and given the vocal chords of James Earl Jones. But before all that could happen, there was the giddy and innocent golden age of Star Wars to enjoy. Back in 1977, unprepared for the modest film's extraordinary success, toy maker Kenner was caught off guard and was unable to get enough stock into shops for Christmas. Fans had to buy an empty box, with the promise that a cut-out voucher could be swapped for the first set of figures – which eventually arrived the following March. With their rigid legs, squashed faces and lightsabers that slid up into their hollow arms, they were hardly the most impressive playthings ever. But to young boys and girls around the world, imaginations fired up by repeat cinema visits, they were plastic passports to another world. Anything with that iconic logo was snapped up.

You were there. We don't need to remind you. There were comics and sticker albums. Pillow cases and lunchboxes.

And, of course, there were videogames.

Red Five standing by

The late 70s rise of Star Wars overlapped neatly with the rise of 'electronics' as the new wonder-

Atari's Star Wars arcade game. Short but incredibly sweet

The original arcade flyers for Atari's first two Star Wars games

›Star Wars secrets

Within weeks of the original Star Wars taking residence in arcades, rumours were whispered in school corridors regarding tricks and secrets that only the hardcore knew.

Shooting Darth Vader's TIE fighter more than 30 times would give you an abundance of extra shields. The faint yellow vector lines on the Death Star sometimes spelled out "May the Force be with you" as you approached. And for those who heeded the wisdom of Obi Wan, you could earn up to a whopping 100,000 bonus points for "using the Force" and not shooting anything in the trench apart from the exhaust port.

science of the future. With this brave new world came the coin-op arcade machine, though the technology was still very much in its infancy when Star Wars mania first struck and it would be several years before the simplistic world of Space Invaders was ready to do justice to Lucas' galaxy far, far away.

Indeed, the humble local arcade wouldn't see any Skywalker action until 1983 – the year that saw the end of the Star Wars trilogy with the release of Return of the Jedi in cinemas. Despite the six year gap, the first Star Wars arcade cabinet harked back to the first movie for its inspiration and delivered a game that still raises the neck hair of most thirty-something sci-fi fans. Already primed for the experience by years of pelting around playgrounds, making 'pee-yow' laser noises, Atari's adaptation cannily realised that it was the climactic Death Star attack that kids most wanted to relive, especially Luke's hair-raising race down the trench to deliver an explosive payload right up Peter Cushing's exhaust port.

Like the movies, Return of the Jedi is easily the weakest of the trilogy

Drawing heavily on Atari's 1980 hit Battlezone for both inspiration and design, the game used the then-amazing technique of 3D vector graphics to recreate the big screen spectacle in the arcade in a first-person view. Hurtling down the trench with John William's bombastic soundtrack crackling through the speakers, and a library of sampled lines from the movie playing at opportune times, it's easy to see why many young fans happily shovelled their entire pocket money for the week into this beast. Unlike the movie, when you finally blew up the Death Star you simply looped back round and did it all over again – the scramble for high scores and a stream of 1op pieces outweighing the need to be too faithful to the story.

Even now, it's still a great game – though the inverted aiming and wandering crosshair are charmingly clunky by modern standards. If you want anything even remotely approaching a challenge, you need to play it on Hard mode as well. In Easy mode it's perfectly possible to destroy the Death Star five times or more in the time it takes to watch a movie trailer. Still, it's a classic for all the right reasons and remains one of the few film-based games to capture the magic of the movie that inspired it.

Star Wars fans expecting more of the same were in for a surprise though.

Out of order

As the final film in the original trilogy was still fresh in peoples' minds, the next Star Wars arcade machine to see the light of day was based not on The Empire Strikes Back, but Return of the Jedi. This came along in 1984, and abandoned the 3D vector graphics of its forebear for a scrolling isometric third-person chase game not unlike Sega's Zaxxon. A multi-level blaster, it once again leapt to the end of the movie for all the action.

Starting out as Princess Leia racing through the forest of Endor on a speeder bike, the first level set the tone for the rest of the game – dodging left to right, while occasionally blasting Imperial troops who stray in front of you. Leading them into Ewok traps adds a fun twist, but some wonky collision detection didn't help matters, as the isometric view made it hard to tell if you were heading for an obstacle.

The next level saw Atari trying to mimic the climax of the film by cutting between Lando Calrissian's assault on the second Death Star in the Millenium Falcon, and Han Solo's attempt to shut down the shield on Endor. Switching between the two different challenges at annoyingly regular intervals, the end result was one of confusion and irritation for gamers as the flow of the gameplay was interrupted time and again. Finally, you had to guide the Millenium Falcon inside the Death Star and destroy the power generator. Watching the Death Star ripped apart by a typically rubbish 8-bit explosion was fun, but by losing the first-person perspective the visceral thrill of the movie sequences was lost. Not helping matters was the fact that all the levels played in exactly the same way, with only the scenery and vehicles changing.

With its claustrophobically narrow play area and twitchy controls, this wasn't a game that did justice to the final chapter of the legendary trilogy. Just as older fans found Return of the Jedi, the movie, to be a somewhat over-simplified addition to the cinematic trilogy, so this dumbed-down arcade machine failed to live up to its predecessor. Luckily, the games still had one more chance to get it right.

Empire divided

Given the less-than-enthusiastic response to the Jedi arcade machine, you can hardly blame Atari for sticking with what worked for its next effort – the middle chapter of the trilogy, The Empire Strikes Back, in 1985. Another vector graphics blaster, it was essentially a re-jigged version of the chipset from the first Star Wars game with different scenes. Lazy? Well, yes, but a welcome return to form after the limp Ewok outing.

Of course, the movie was unique in the trilogy in that it

had all the exciting vehicle combat near the start of the film, with the ending relying on a whole ton of shocking revelations and plot twists that would be rather tricky to capture in game form (Luke, am I your father? Press the right button now!).

This meant that the first level, still rendered in those timeless wireframe graphics, saw you trying to blast those pesky Probots in the snowy wastes of Hoth. Nothing too taxing or exciting, but it was just a taster for the debut appearance of what would become a Star Wars gaming tradition: the AT-AT battle.

Still the coolest moment in any of the Star Wars movies, it's an iconic action sequence with good reason – which probably explains why it's appeared in pretty much every Rogue Squadron game ever since. Zipping along mere feet above the ground, and flying between the legs of the gigantic walking machines for bonus points, this was an experience that matched – and even topped – the trench battle from the first Star Wars game. Trouble was, this was only level two, and the Empire Strikes Back game suffered from peaking too early. Once the AT-ATs were despatched, you switched to the Millenium Falcon for an outer space battle with TIE fighters, followed by a diversion into the asteroid field. There's nothing wrong with these levels – indeed, as the game is essentially a reworked version of the first game, it's every bit as fun and playable. But there's no real climax to the game, no big ending to aim for that could compete with destroying the Death Star. This is largely due to the structure of the film, of course, but there was always a nagging voice in your ten-year-old mind that just wanted to go back and play the AT-AT level over and over.

Ironically, you could actually do that...if you had an Atari 2600 at home.

Home advantage?

As detailed in our feature on the peculiar history of 20th Century Fox's entry into the Atari 2600 market back in issue 11, the rights to turn the blockbusting movies into home videogames went to Monopoly creators Parker Brothers.

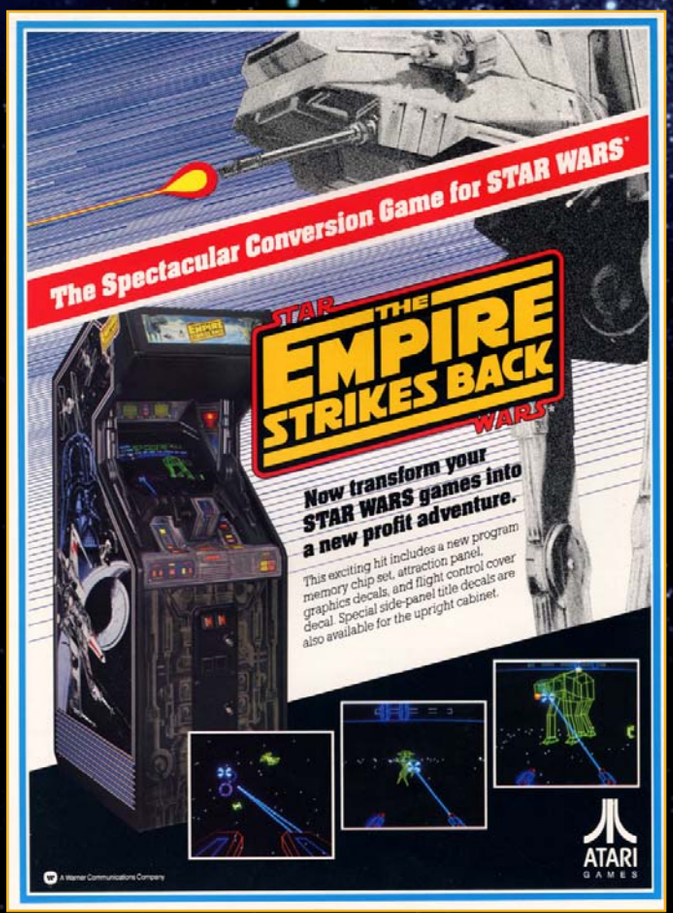
Just as the coin-op releases monkeyed around with the order of the movies, so did the home versions. The first game release – in fact, the first official movie-to-game adaptation ever released – was The Empire Strikes Back which arrived on the console in 1982, two years after the film, but a whole year before Atari got its first Star Wars game into the arcades.

Based entirely around the AT-AT scene, it was a side-scrolling shooter that managed a remarkably solid job of recreating the Star Wars vehicles using the 2600's limited resources. Controlling a snowspeeder, you had to bring down the lumbering Imperial behemoths – no small task, as each one could take up to 48 hits before being destroyed! All the time, you had to dodge incoming laser blasts and the occasional homing missile. Take too many hits, and your craft turned red. You could land for repairs twice, but after that you were on your own. On the other hand, if you could avoid enemy fire for two whole minutes (which was nigh impossible) then you could "use the Force" and become invincible for a short time. Surprisingly involved for such a primitive game, and a damn fine shoot-em-up in its own right, Empire Strikes Back was a predictably huge hit for Parker Brothers and set a high benchmark for both future Star Wars games and movie-based games in general.

1983 rolled around, bringing with it a fresh wave of Star Wars mania as Return of the Jedi opened in cinemas and Atari's Star Wars game hit arcades. Eager to capitalise on this, but with no time to try and tackle the task of recreating the coin-op, Parker Brothers instead rushed out a couple of Star Wars games based on scenes from the trilogy.

Star Wars Jedi Arena took its inspiration from the scene in the

Many arcade operators chose to upgrade their Star Wars machines to Empire, hence the current rarity of the original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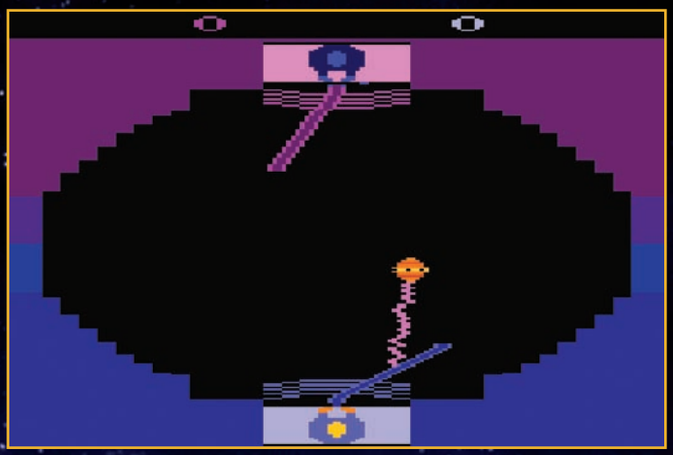


Atari's 2600 console was home to four variable Star Wars games released between 1982 and 1984

first movie where Luke begins to learn to use his lightsaber against automated drones. The game has you, as Luke, standing in the middle of the play area, deflecting blasts by moving your lightsaber around. Realistically, it's entirely possible that this simplistic variation on the bouncing-ball game was simply an existing prototype that was tagged with the Star Wars brand to quickly cash-in. Apart from some token references on the front-end there's little in the game to connect it with Star Wars and, with or without the movie branding, it's hardly a great game.

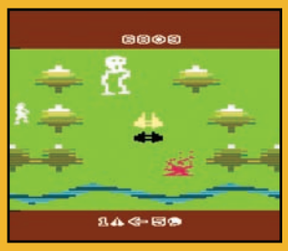
Star Wars Death Star Battle was certainly tied to the movies, though the quality wasn't much better. Loosely based on the climax of Return of the Jedi, you controlled the Millenium Falcon and had to blast incoming fighters while the Death Star hovered above, protected by a big thick shield. Slipping through the randomised hole in the shield granted you access to the next stage, in which you had to batter down the outside of the Death Star to expose the vulnerable core inside. Destroy that, dodge the debris and loop back to the start. A version of the game also appeared on the 5200, but besides a few new graphical effects, it was exactly the same game.

Parker Brothers returned to form in 1984 with – finally – a home conversion of Atari's original Star Wars arcade machine. Shifting all those vector graphics around on an arcade chipset was tricky enough, but attempting to replicate the effect on the minimalist 2600 was a mighty undertaking.

Amazingly, Parker Bros pulled it off. Sure, the vector lines are a bit chunkier and the game doesn't move quite as fast, but for a generation of kids who had played the game to death, this was truly like having an arcade in your home. The game even attempted a lo-fi version of the famous theme tune, and tossed in some early voice samples for good measure – even if they did sound like Alec Guiness was whispering through a sock on a badly-tuned radio. The game was also converted to the Atari 5200 and Colecovision consoles, with both versions offering better graphics and clearer sound.

›Battle for Endor

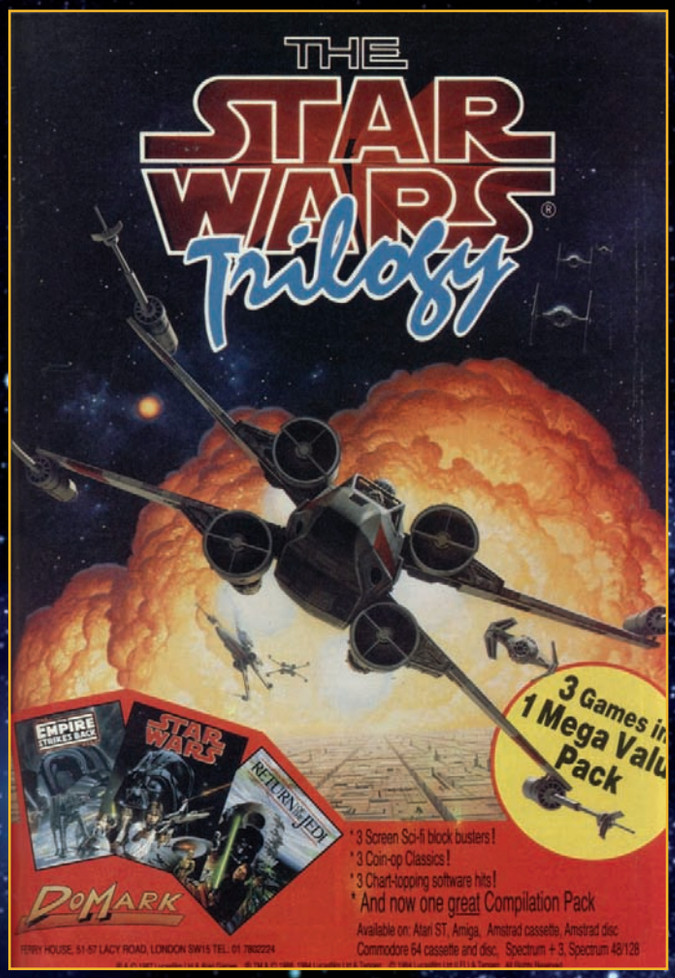
Death Star Battle was the only Atari console game based on Return of the Jedi, though another was planned and announced in the Parker Brothers 1983 catalogue as Ewok Adventure. In 1997 a working 2600 prototype of the never-released Ewok game was discovered. Ironically, those who have played it consider it one of the best Star Wars games on the system – and certainly an improvement over the generic clichés of Jedi Arena and Death Star Battle.



Controlling an Ewok in a glider, you swooped over the multi-screen forest, throwing rocks at well-rendered AT-ST Scout Walkers, speederbikes and Stormtroopers. By flying into an Imperial vehicle at the right height, you could gain control of it and then use it to attack the shield generator. Destroy the shield generator and you started over, on a higher difficulty. Ewok Adventure was true to the movie, had better-than-average graphics and gameplay that was both varied and challenging. Nobody really knows why it didn't deserve a commercial release, but it can now be found online in ROM format so all is not lost.

Micro power

Despite the variable quality of the console versions, it was inevitable that the success of the games would attract the attention of the nascent home computer industry. Sinclair Research snapped up the rights to Death Star Battle for the Spectrum in 1984, while the Commodore 64 received a version of the original arcade game which famously used sprites instead of vector graphics.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DOMARK

Domark bundled together its conversions and released them as The Star Wars Trilogy

However, it wouldn't be until 1987/8 that Domark clinched the rights to bring Atari's coin-op trilogy to the home computer scene. All three games landed on the (deep, Vader-style breath) Spectrum, Commodore 64, Amstrad CPC, BBC Micro, Amiga, Atari ST and PC. Return of the Jedi was still a rather limp side-scroller, but the two vector graphics games (adapted, of course, by Vektor Grafix) still retained their charm even though titles like Elite and Starglider had already shown that home computers could do more with wireframe spaceships than simple blasting. The new version of Star Wars for the C64 did attempt to use vector graphics, but at the expense of the frame rate which was slow and choppy. Star Wars on the Speccy, meanwhile, was completely silent with no in-game music or sound effects. Domark's decision not to include a 128Kb version with sound was bizarre. Lessons were obviously learnt though, and The Empire Strikes Back did feature an enhanced 128Kb version with some stirring AY renditions of the original arcade music.

And so the Star Wars movies left cinemas, and the first wave of Star Wars gaming came to an end. While fans would have to wait many years for the films to return to the big screen, keen gamers didn't have long to wait for the next wave of Jedi gaming. As the 90s dawned, Nintendo slowly began to take control and its range of home consoles would offer developers exciting new ways to bring Star Wars to life.

NEXT MONTH
The History of Star Wars Videogames Episode II: LucasArts Strikes Back. Skywalker, Solo and Co assault GameBoy, NES and SNES

>Attack of the Clones

The lack of Star Wars games for home computer systems led, inevitably, to the void being filled by a slew of unofficial titles that ripped off Star Wars with an audacity that, today, would lead to the Lucasfilm lawyers hauling you into court faster than Mark Hamill's career went down the toilet. However, some of these clones were better than the official Star Wars games. Others, meanwhile, were like a punch in the Jawas. Here are some of the most notable rip-offs in all their galactic glory...

Return of the Jedy
M.K. Circuits, 1983

A frankly bizarre game in which you control a rotating laser gun in the middle of the "Jedy games arena". There are eight targets and either "D.Vader" or "R2" will appear at random. Pressing 0 rotates you (clockwise only) and pressing 1 fires the laser. Destroy 30 Vaders and... you get to do it again, only faster. George Lucas would not be amused.

Battle on Hoth
Duncan Kinnaird, 1983
OK, it's not really fair to call this a rip-off, as it was a type-in program from Your Computer magazine, sent in by 16-year-old Duncan. A side-scrolling shooter not a million miles from Parker Brother's Empire Strikes Back game, it contains possibly the worst rendition of the Star Wars theme, but also the best AT-AT graphics of the 8-bit era.

3D Starwars
Elfin Software, 1983
After an interminable amount of guff about Luke Skywalker and Darth Vader, plus such grammatical gems as "the Jedi mission unsuccessfull" and "metiorites harmless", this game finally lets you get into action, and plonks you in a baffling space shooter where the enemy are star-shaped blobs or freakish bird things. In other words, it's got sod all to do with Star Wars.

3D Death Chase
Micromega, 1983
Obviously 'inspired' by the speederbike chase from Return of the Jedi, this is a bona-fide Spectrum classic regardless of its roots. With a simple 3D game engine, and basic controls (left, right, fire) it manages to capture the exhilaration of the movie sequence far better than the subpar official arcade machine.

Death Star
Rabbit Software, 1983
In a twist that would have most Star Wars fans scratching their heads, you control a miniature Imperial Star Destroyer as it chugs down the Death Star trench, blasting things that look a bit like TIE Fighters and other sundry rotating shapes. Sluggish, to say the least, it's also worth noting that all the sound effects are lifted wholesale from the underground motorbike classic, Wheelie.

Empire Fights Back
Mastertronic, 1985
Is fighting back better or worse than striking back? You'll never know, especially if you play this incomprehensible game – which does contain stars, but otherwise has no connection to Star Wars at all. Written by Clive Brooker, who would also bring us One Man and his Droid, this is strangeness incarnate.

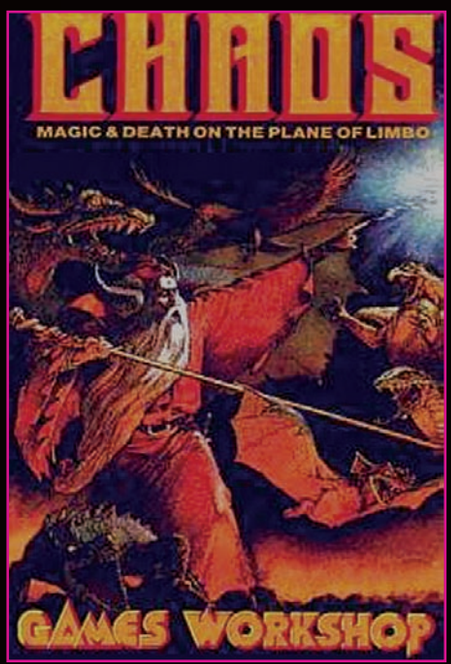
Creating Chaos

Dan Whitehead chats to Julian Gollop, creator of Chaos and the Godfather of computer strategy gaming...

Mention the word 'strategy' to a gamer these days, and they'll tell you about frantically harvesting resources, building generic bases and then click-dragging dozens of anonymous units and sending them to attack another bunch of units and bases on the other side of a map before they do the same to you.

Needless to say, it wasn't always thus. Back in 1984, strategy games meant plotting, planning and taking your time before committing to a course of action. Strategy, in other words. It meant turn-based gameplay, and the pioneer of turn-based strategy games was the mighty Chaos for the ZX Spectrum, coded by young games enthusiast Julian Gollop while studying at the London School of Economics. If you're reading this magazine, then you must surely have played this classic game. Or at least heard of it. If you haven't, and you're not reading this magazine after mistaking it for Practical Topiary, then let us explain.

Subtitled 'Battle of the Wizards', Chaos was at once both astonishingly simple, and surprisingly complex. Set in a square black void, up to eight wizards used their randomly generated list of spells to conjure up creatures both earthly and fantastical to destroy each other. What made the game so clever, and one of the reasons why it remains a satisfying strategy experience to this day, is the way that the spells cast would influence the gameworld. Every spell had a percentage chance of success. Something simple like a Giant Rat was easy – you couldn't fail to summon one of those. By contrast, the fabled and nigh-indestructible Golden Dragon had a 10% chance of success. But every creature also had an alignment – Law, Chaos or Neutral. The more Law spells were cast, the more Lawful the world became, and the easier it was to cast more Law spells. The reverse was true of Chaos spells. So by cunning use of your arsenal, you could utilise your weaker spells to shift the balance of the world in such a way that your strongest monster became less of a gamble. You could also cast any monster as an illusion for guaranteed success. Trouble was, any wizard could instantly vaporise such a beast by casting a Disbelieve spell on it. Yet again, a simple idea in theory, but layered on top of the other game rules, it opened up a deceptively broad range of options so the game would never play the same twice.



Much like the chaos theory that would later steal its name, Chaos managed to produce an eerily lifelike world of cause, effect and random change within the confines of the Spectrum's 48Kb memory. It influenced every strategy game that followed, and is still much-loved today.

The action would be usually begin in sedate fashion, but with eight warring wizards, all-out chaos quickly ensued

Retro Gamer was lucky enough to prise Julian Gollop away from his latest computer strategy project to delve into the mystic mists surrounding the creation of Chaos.

Retro Gamer: You started programming on the ZX81. Did you find that learning in the confines of such tiny memory taught you how to squeeze the most out of a system?

Julian Gollop: Without a doubt, and it forced me to learn assembly language, rather than rely on BASIC. Then I upgraded to a 16Kb rampack, which did allow a lot more to be done but suffered from the dreaded 'rampack wobble'. After a frustrating attempt to glue the ZX81 and rampack to a large plank of wood, I quickly moved to the 48Kb Spectrum. At the time I thought this machine had huge amounts of memory.

RG: You went on to create Nebula and Rebelstar Raiders for the Spectrum. What would you say you took from those first commercial projects – coding tricks, publishing experiences – that helped you later in your career?

JG: I guess the popularity of Rebelstar Raiders led me to recreate the basic design in future games, but I can't say that the programming was particularly great. Nebula was essentially an early version of space games like Master of Orion, and many others. It's a shame that I never re-visited this theme. At the time I made these games I was in my year off before going to college, so I hadn't seriously considered making computer games as a career at this stage, but I did enjoy the whole process of creating a game, including the programming, art and sound.

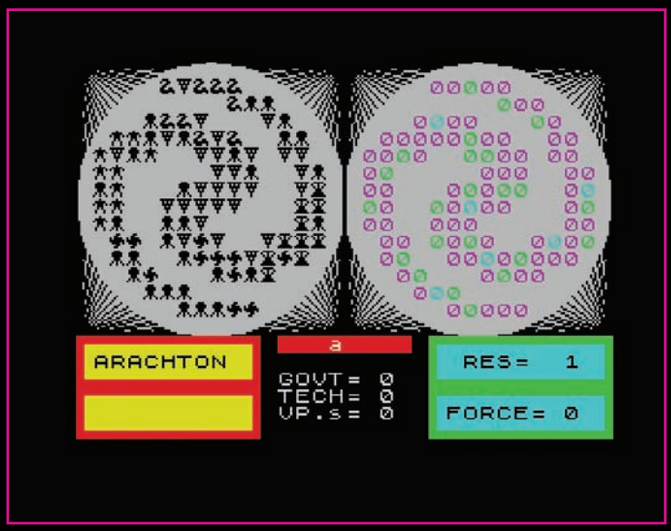
RG: Were you a role-playing gamer before Chaos came along?

JG: Yes, certainly. I played quite a bit of D&D, some Dragonquest and the superb Traveller. I was more keen on board games though. I had a collection of fantasy games, and war games, by SPI, Avalon Hill, TSR, and others.

RG: How did Chaos come about? Did you come up with the game and then take it to Games Workshop, or did they come to you?

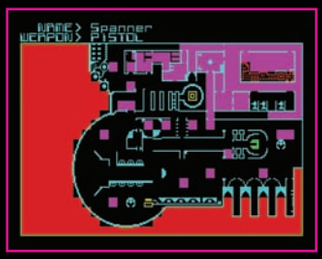
JG: Chaos was actually based on a board game I created in 1982 after seeing some kids at school playing a Games Workshop board game called Warlock. They didn't let me play the game, so I made my own. I was intrigued by the fact that Warlock used cards, but less impressed by the fact that there was no arena for characters to move around. Although I never played Warlock, I was sure my game was better. Then one of my school friends who had a BBC computer programmed a computer version of my board game, which worked quite well. Unfortunately, due to the limited memory of the BBC it had to be programmed in text mode, and graphically it didn't look very good. So two years later, after I got my Spectrum and learned to program assembly language, I decided to make my own version of the game. I made a few enhancements to the game system, but it is essentially very similar to my original board game.

At first it was going to be published by Red Shift, the company a group of friends had set up, but the financier of the company pulled the plug on it, so we had to go elsewhere. At the time Games Workshop wanted to get into the computer games market, and Chaos was among several games we did for it. My colleagues produced computer version of Games Workshop board games, Talisman and Battelcars, but Chaos was the only one which was completely original. Well, apart from the fact that it was actually inspired by a Games Workshop game that I hadn't actually played several years previously.



RG: How long did it take you to program Chaos?

JG: I can't remember exactly how long it took, because the programming was interrupted when I started university, but I soon got bored of studying and went back to programming part time until it was finished.



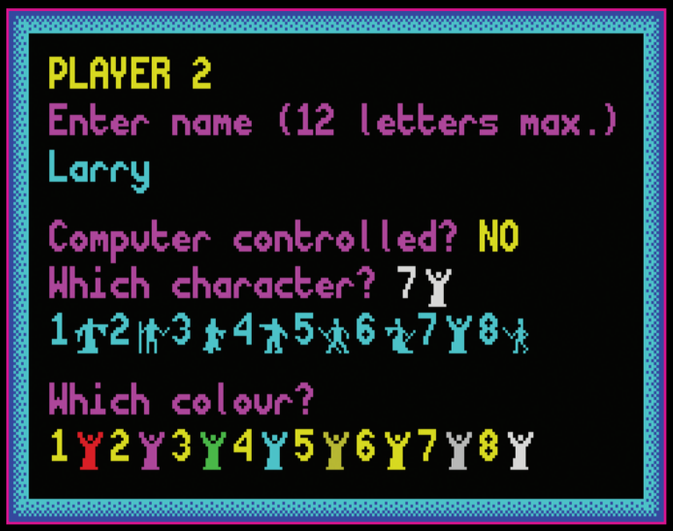
Julian's first Spectrum strategy games were published in the UK by Red Shift software

RG: What were the hardest parts of the game to code?

JG: Nothing was particularly difficult except that it was the first long program I had written in assembly language. The ZX microdrives were a bit of a pain though, but I never actually lost any data.

RG: How did you go about creating a challenging artificial intelligence opponent in only 48Kb?

Rather than a simple static screen, Laser Squad introduced a much larger battle ground



Up to eight players could take part, and each could conjure spells and summon monsters

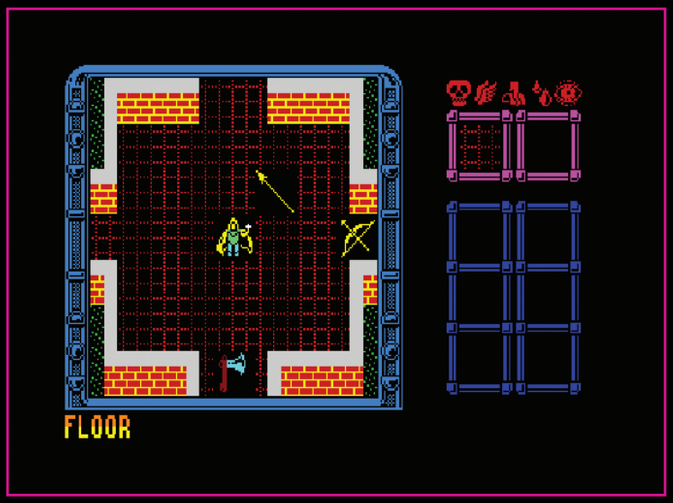
JG: I based the AI on some behavioural rules, plus a small element of randomness. The wizard avoided threats, but took opportunities to attack, whilst his creatures attacked the threats to the wizard, or went for the enemy wizards. It probably appeared more clever than it actually was.

RG: What process did you go through deciding which monsters to include, what they'd look like and how to convey them in only a few frames of animation?

JG: The monsters were entirely based on my original board game. I wanted to include creatures that had some unique traits, such as being undead, flying, or breathing fire.

RG: Do you have a favourite monster or spell from the game?

JG: My favourite spell has to be the Turmoil spell, which randomly repositions everything



The belated sequel to Chaos was released in 1991 on both 8-bit and 16-bit machines

>Remaking Chaos

With its broad scope, but simple design, Chaos was always an obvious choice for homebrew retroheads looking to stretch their coding skills. It's no surprise then that there are several freeware attempts to update the game for the modern PC floating around like croutons in the cybersoup. Here's a rundown of the best, and what you can expect when you download.

Anarchy

www.btinternet.com/~t.harte/SoftySoft/anarchy.htm

Abandoned by the good folk of SoftySoft when university life pulled them all to separate corners of our fair isle with the promise of subsidised booze and daytime television, Anarchy is still available in a pretty solid and playable state. It's a bold attempt to bring Chaos kicking and screaming into the 3D world and, remarkably, it works. Mostly. The polygon look has that early 90s DOS game vibe to it, which can make a crowded game board a tad tricky to decipher, but other than that minor gripe this is a novel effort and worth downloading for curiosity if nothing else.

Total Chaos

http://xavnet.chez.tiscali.fr/chaos

One for the Amiga nut, this one, as it only runs on Commodore's late, lamented beige beast. It retains the top-down viewpoint of the original, but beefs up the gameplay with some nifty new additions. As well as more spells to unleash (including a greater array of environmental attacks) there are more varied battlefields, and the option to form alliances with other wizards rather than killing everyone. The game also lets you see how much damage you or your creations have taken, which removes a lot of guesswork from your strategy. Shame it's not on the PC, as this is one of the best updates around.

Chaos Funk

www.reflectedgames.com/freegames.html

For the Chaos purist, this is the remake that stays closest to the 1985 original. The spells are the same, the gameplay mechanics are the same. All that's been changed are some slightly updated graphics (don't worry, they're still charmingly dinky little creations – they just have more colour now) and extremely handy mouse control, which makes games flow a lot faster without the need to keep flipping back to the spell select screen. The only downside is the inability to name your wizard, and a few bugs that make certain spells crash the game (Turmoil and Vengeance especially). Still, it's only a small download, and a real treat for fans. Despite the title, however, there is no funk in the game. Not even a small Bootsy Collins.

›Laser Squad Nemesis

If you're thirsting for an old-fashioned turn-based strategy game, much like Chaos, that manages to utilise modern computer technology without losing the simple charms of yesteryear, then the latest iteration of the Laser Squad franchise will be right up your street. Much like its 8-bit ancestor, the idea is to guide a squad of space marines through dangerous missions against alien foes. You move each unit one at a time, try to second guess where the enemy is hiding, and use both firepower and the environment to your advantage.

What makes it deliciously different is a subtle change in the gameplay mechanic. Rather than having a finite number of action points that can be used each turn, you instead have limited time to play with. Each unit can move or fire as often as they like, providing their actions don't take more than ten seconds. Once you've given all your orders, all your troops move out at once, following the simple-yet-flexible rules of engagement you've set for them.

What this means is that you have a game designed primarily for turn-based online play, via e-mail. Each player can plot their moves, and test them offline, before submitting them to the LSN server. The server then runs both sets of orders together, generates the outcome, and e-mails the results to both players, who then watch it unfold and plot their next ten second burst of strategy. What you get are intense skirmishes, usually lasting no more than 15 or 20 turns, but packed with seriously taxing strategic problems.

It sounds strange in theory, but in practice it's very intuitive – and it still looks and feels like the Laser Squad of old, even with numerous updated elements. For a unique blend of retro and modern, you can't go far wrong. The free LSN demo can be downloaded at www.lasersquadnemesis.com.

Laser Squad Nemesis is available to buy for £20, but a free demo version is available

on the map. However, you could only get this spell from the enchanted wood, and there was only about a 1 in 65 chance of getting it. Otherwise, it has to be the Gooey Blob which appeared again in Lords of Chaos and again in Magic & Mayhem, the PC game we made in 1998 that was inspired by Chaos.

RG: Creating a monster as an illusion – clever gambit, or a waste of a perfectly good spell?

JG: Depends on your opponent really, but it works better against the AI than against a human opponent.

RG: Are you surprised at the continuing popularity of Chaos?

JG: Yes, very much so.

RG: What do you make of the many homebrew attempts to create a version for the modern PC?

JG: The more the merrier. Imitation is the sincerest form of flattery. I would like to see some innovations on the basic idea.

RG: Can you tell us a little about the transition from Chaos to Laser Squad? It's a much more sophisticated game engine.

JG: Yes, Laser Squad was my second attempt at a major assembly language program, and much better designed. The first major decision was to create a larger map with a scrolling map viewing window, which was later used in Lords of Chaos, of course.

RG: You also coded Laser Squad for the C64 and Amstrad. How did you find the different machines, and did you have a sentimental attachment to the Speccy?

JG: The Speccy will always be my favourite. It was truly a blank canvass, with very little hardware to deal with. The C64 was the most impressive machine for games though, with its sophisticated sound and sprites – but what a hideous disk drive it had! The Amstrad was solid enough, but a bit lacklustre in comparison.

RG: Lords of Chaos seemed very much like the best bits of Chaos and Laser Squad combined. Was that the idea behind it?

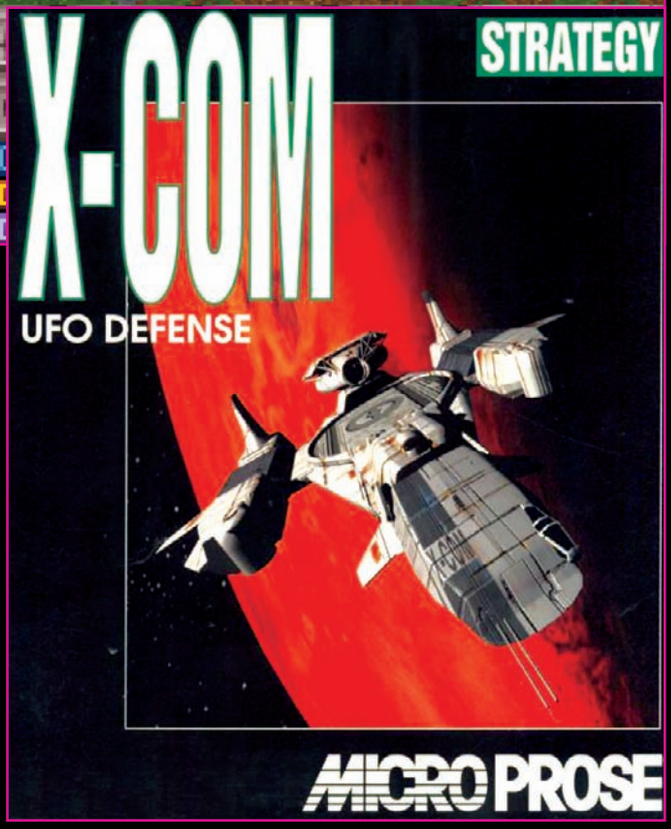
JG: Yes, and to create more of a RPG type game. Your wizard character improved from mission to mission. If we had added a storyline linking many missions we would have had something similar to the Japanese tactical RPGs that became popular at a later date.

RG: What were your feelings on the transition between the 8-bit and 16-bit eras? How did the technology affect your work methods? And going from so-called 'bedroom coding' to working with larger teams and corporate publishers, how did the changing industry impact on the process?

JG: It didn't affect us much at the time. We went rapidly from programming the Atari ST and Amiga to the PC, with X-Com. By that stage we really wanted to program on the PC, because it was the most popular platform for strategy games. However, there was still just me and my brother Nick working on the games. So our team never really expanded until 1995 when we finished the first X-Com game. Then we expanded like crazy and we were working on two big projects at a time. It was still a fun process, if stressful at times. However, dealing with publishers was always quite difficult and we had severe problems with the X-Com Apocalypse project, where we were doing all the coding, but Microprose was providing the artwork.

RG: How did you feel about Laser Squad 2 turning into X-COM and it subsequently being absorbed into Microprose? Was it hard to watch something you created turn into a corporate franchise that was out of your hands?

JG: Actually, at the time we were sick to death of all things X-Com because of the problems with X-Com Apocalypse. However, it is sad that we haven't been able to continue the series as it should have been done. Instead the franchise was squandered on games that bore little relation to the first three. I remember attending E3 in 1999 where there



The first X-Com was released with a variety of subtitles, including UFO Defense and Enemy Unknown

was a huge display for X-Com: Alliance, with dwarves dressed as aliens, and giant plastic alien foetuses in tubes. I wandered up to a screen where an enthusiastic PR guy asked me whether I was familiar with the series. I said that I had played it a few times. Then he was trying explain how they had listened to the fans and how the game was returning to its roots. All I could see was a strange FPS hybrid running on the Unreal engine with little strategy involved. The game never made it to the shelves.

RG: Is Laser Squad Nemesis a deliberate attempt to get back to the small creative teams and classic gameplay of the good old days?

JG: Yes, for sure. It has been a great fun project, and I have enjoyed playing a strategy game online against other human opponents.

RG: What does online play bring to the strategy genre?

JG: It brings a real sense of challenge, knowing that you are not just beating another robotic, cheating AI. But most of all it creates a great player community who have a lot of input into the game.

RG: What are your plans beyond Laser Squad Nemesis? Is sci-fi your preferred genre, or would you like to dip a toe in swords-and-sorcery fantasy waters again?

JG: We have gone for another small project. It's a strategy game based on one of my earlier Spectrum games which is not entirely unlike Laser Squad. The most interesting thing of all though, is that we are developing it for the GameBoy Advance. But after this project I would certainly like to go back to the fantasy genre again.

RG: The success of Harry Potter and Lord of the Rings must have stirred up a lot of interest in the idea of warring wizards. Were you ever tempted to cash in with a new Chaos?

JG: I have never thought about it like that. I doubt there would be much cashing in, but I would like to revive it in some way.

RG: Finally, what do you think of the state of the current strategy genre? Specifically, the impact of real-time strategy, which I personally feel has resulted in a lot of games that are all about frantic mouse-clicking but very little to do with actual strategy. I think you need the turn-based system in order to give the gamer a chance to really wrap their brain around a situation..

JG: I couldn't agree with you more. In some ways it has become a little bit depressing in the PC market, with so many games which are little more than variations on the real-time strategy theme. I did enjoy Warcraft 3 though, simply for its exuberance and quality. However, there have been some real gems available on other platforms. In particular I like Disgaea on the PS2, which is a bit like a fantasy version of X-Com on acid, and also Advance Wars and Fire Emblem for the GBA. There is hope for us all.

Retro Collector

If you're anything like us, you trawl the pages of eBay on a almost daily basis, looking for collectable items to add to your retro collection. You probably also spend the odd Sunday morning touring the local car boot sales in search of rare games at bargain prices. But what are the rarest retro titles out there? Which ones could command the highest prices when placed under the hammer? We asked collector Mat Allan that very question, and he revealed the following 20 titles...

Collectors sometimes get a hard press from the gamesplayers out there. It is partially understandable; why collect something if you don't aim to play it? But the thing is, collecting is also a way of preserving and possibly archiving a game that might get lost forever. It isn't solely about having it sitting nicely on a shelf. There is also the factor that some great games have limited production runs. Treasure games such as Radiant Silvergun and N64 Bangia-oh, for example, only had 10,000 units produced; Atlus is notorious for having low printing runs on its games as well.

In this article, you won't find any of those games however. These are games that, relative to the other titles on their format, are considered the cream of the crop to track down rarity wise. Directly comparing them to each other is pointless however; if this was purely about the rarest titles overall, then half the entries would be filled by the Atari 2600! So sit back and read on, and maybe you'll find you unknowingly had an incredibly rare game in your collection...

Kizuna Encounter

NeoGeo

Well let's start with the big one. The one that really shook up eBay and made people realise that games could be worth huge money. Why is the European version of Kizuna Encounter so hard to find? The year 1996 was a big year for NeoGeo releases, and it is theorised that in the midst of all the hyper-publicised titles available, this got lost in the mix. Very few copies were sold, and those that were left ended up being shipped back to Japan to be converted into Japanese versions. You see, the game on either version of the cartridge is exactly the same; it is one of those that changes the internal language based on the NeoGeo's region setting. So all the value bizarrely is in the packaging, specifically the manual, cover sleeve and cartridge label. And with only a few of these known to still exist, this title is raised even higher than the usual high values commanded in the NeoGeo collecting community.

Guestimate: £4,000-6,000 (complete)

Pocket Reversi

NeoGeo Pocket Color

The fate of Pocket Reversi within Europe (and specifically the UK) mirrors that of Kizuna Encounter. The Pocket Color, whilst a very good piece of kit, sadly could never hope to encroach on the territory dominated by the GameBoy. Pocket Reversi, a game based on Othello, was never going to be a system seller and consequently did not sell that many units. Estimates put the production run at 1,000 units, but most of those were probably returned to the distributor and transformed into a different title. How many survive is a good question, but it's likely to be under 100 units. That's complete by the way. Finding the game loose (or the Japanese version) is neither difficult nor costly. All the value of the game is once again in the packaging. It's not the rarest Pocket Color title worldwide, but it's definitely the most desirable.

Guestimate: £100-150 (complete)

Ultima: Escape from Mount Drash

Commodore VIC-20

Retro Gamer covered this one in-depth in issue eight. Written by a friend of Ultima founder Richard Garriott, Ultima: EfMD was a game that had nothing to do with the series until Sierra stepped in and gave it a new name. Despite the new title, it still did not sell that well, especially on a format that at the time had not taken off as much as it deserved, and never would properly with the imminent arrival of the C64. Sources put the production run at around 500 units, but how many were actually sold probably will never be known. To date, only 10 copies are known to be held by people and of them, only three are complete. Desire by both VIC-20 collectors and Ultima aficionados is what has caused it to become the most valuable computer game ever.

Guestimate: £300-500 (loose), £1,000-1,500 (complete)

Video Life

Atari 2600

There are a lot of ultra rare Atari 2600 games out there to consider; other titles include Karate (by Ultravision), Eli's Ladder and Gauntlet (by Answer). The whole article could have been filled with them. But why does Video Life get the nod? Because out of all of them, the actual number of units produced is known. And that number is under twenty. The publisher CommaVid had earlier released the Magicard, enabling budding home programmers to create their own basic 2600 game on its own machine. All Magicard owners were eligible to buy a copy of Video Life from CommaVid, which was an improved cartridge version of the Life program provided at the back of the Magicard manual. Evidently not that many people took Magicard up on the offer. What is even more curious is that almost all of the copies made are accounted for with collectors. Should any of them give one up, expect a feeding frenzy to occur for ownership rights.

Guestimate: £800-1,200 (loose), £1,500-2,500 (complete)

Protector: Limited Edition

MB Vectrex

It may seem strange that a homebrew title should be included within the article, but there is good reason. At first it may not seem obvious given that other homebrew titles had the same, if not a lower, number of units made (in this case 100), and that the game is now available in an unlimited format. However it suddenly dawns when you consider that the Vectrex is the number two format for homebrew purchases (after the Atari 2600) and that Protector itself is quite probably the best game ever released for it. And the only way to get the stunning packaging, custom made overlay and secret hidden bonus game is to own one of the 100 limited copies. It's been almost two years since it was released, and in that time only three have come up for resale, making it also the most valuable homebrew release out there.

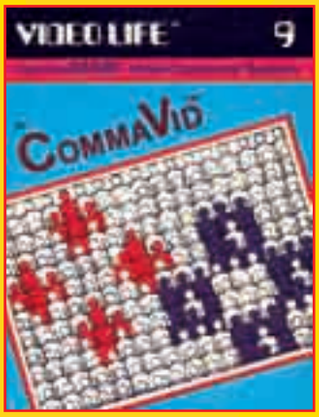
Guestimate: £100-120 (complete)

Rodland

Nintendo Entertainment System

By far the rarest PAL NES game you can hope to find. There may be a few harder to locate NTSC titles, but almost all of them are unlicensed. This one was licensed. Where it was actually released is still subject to debate; it appears Spain got the bulk of the carts, with perhaps Italy and the UK getting a few along the way. The game itself was written by Simon Pick (more well known for a host of classic C64 games) for Sales Curve (who published all conversions of the game) and isn't exactly a direct translation of the

Pocket Reversi



Video Life

Protector: Limited Edition

Rodland

Tetris

Space Invaders Collection

Darius Alpha

Double Dragon

arcade; there are some extra levels leading up to the bosses for example that are far harder than anything else encountered in the game. The NES collection scene is huge in the US; it appears to be much smaller in Europe, so the chances of actually acquiring this might not be so low after all.
Guestimate: £80-150 (loose), £200-300 (complete)

DarXide

Sega 32X

The 32X was an early example of Sega attempting to add extra power and functionality to one of its consoles, but it was also an early demonstration of why these peripherals never seen to work. DarXide and Primal Rage are generally considered the rarest PAL titles to find; however whilst the US version of Primal Rage is easier to find by comparison, DarXide is Europe only and programmed by David "Elite" Braben to boot. What also gets the American collectors choking back the tears is that not only is the game itself actually rather good (a graphically impressive 3D space shooter along similar lines to such titles as X-wing), but it will only work properly on PAL 32X hardware. One other reason for being in Europe aside from the easy access to RGB devices. The game has now been re-released for pocket PC and other mobile devices.
Guestimate: £150-200 (complete)

Tetris

Sega Mega Drive

Tetris on a Sega machine? That's right. Sega bought the rights to produce a home version in Japan from Tengen, who in turn had bought them from Mirrorsoft. Everyone knows in the ensuing legal row that the rights eventually went to Nintendo and Bulletproof Software, so Sega (and Tengen in the US) had to withdraw its copies from the market sharpish. It isn't even certain whether any of Sega's product made it to the shelves (some of Tengen's did and that's why that copy is rare, but not rare enough for this feature). It didn't stop the pirates from heavily producing a version somehow and that is actually rather easy to find. Only the real version has a manual, and there are only four of them known to exist currently, with one of them being sold privately for almost one million Yen. Almost makes collecting for the NeoGeo seem like child's play.
Guestimate: £2,500-4,000 (complete)

Space Invaders Collection

Nintendo Virtual Boy

There are actually a number of hard to find Japanese Virtual Boy games; this happens to be one of the hardest to track down. Every system seems to have a version of Space Invaders for it; even the Nuon has one. And so it was decreed that Taito would in fact release yet another update on yet another niche platform. You get the standard Invaders gameplay from the first two arcade machines, plus a 3D enhanced mode for each to choose from. There's no real need to explain the gameplay as everyone knows what Space Invaders is all about, and here it plays pretty well. It is really up to you whether you want to pay the asking price for the privilege, even if you are one of the people who genuinely like the Virtual Boy.
Guestimate: £300-500 (complete)

Darius Alpha

PC Engine

Not all rare games were necessarily available directly to buy in shops. And when it comes to the PC Engine, there are plenty of rare titles to be on the lookout for. Realistically the only way you could have gotten hold of a copy of Darius Alpha was by buying the Darius Plus HuCard and the Super Darius CD in Japan. You could then be entered in a draw to see if you won a copy. Hence there are only a few hundred copies of the Alpha HuCard out there, making it easily the hardest title to find for the platform. The twist for Darius Alpha is there are no weapon upgrades, no real levels, and no enemies; just bosses. Beat a boss and you get the next one. This in itself is rather surprising and takes a bit of getting used to. Most of the graphics, music and bosses are taken from the Darius Plus title. One for the true collector here.
Guestimate: £300-500 (complete)

Double Dragon

Commodore 64

Back in 1989, Melbourne House released its utterly dire conversion of the popular Technos arcade machine. Fast-forward three years and in the post 64GS world, Ocean decides to release a cartridge version of the game. Except this isn't the same game. For whatever reason, Ocean commissioned a new version to be written specially for release. The most likely timeline of events would have the

idea being planned, executed and then near the end, realising that the market has completed disappeared for cartridges. No doubt to try and recoup some of the costs, the game was still released but with the lowest quality packaging possible, and bizarrely was only seen on sale at various computer shows throughout 1992 instead of the shops. Three copies are known to be out there, and compared to most C64 software, goes for a price normally reserved for rare disk titles.

Guestimate: £40-60 (complete)

Great Giana Sisters

Commodore 64

This one is rather famous. Or infamous, however you wish to put it. Released in Germany by Rainbow Arts in 1987, it was picked up for UK distribution a year later by US Gold. Something happened on the way to the shelves though; more specifically a Nintendo rep spotted the game running at a computer show and promptly initiated a cease-and-desist order on the game. That didn't seem to affect it being sold in Germany however, but copies in the UK were removed within two weeks of being released. Which was a pity as it was a very good Super Mario Bros clone and had received superb marks from the major magazines of the time. Rainbow Arts would suffer more ignominy later in the same year as Katakis was also banned from sale in the UK, even before it made the shelves.

Guestimate: £20-30 (tape), £50-80 (disk)

Akalabeth

Apple II

Or what Richard Garriott did first. This entry specifically relates to the first incarnation of the game, before California Pacific picked it up for distribution. Although either of the CP versions are also rather hard to find, this one truly is something to behold. Handmade and sold in ziplock bags whilst Garriott was working in a computer shop, they all have handwritten labels and are individually numbered. It is also the only release of the game to come on tape as well (as CP only sold it on disk). How many were made? To date, twelve have been accounted for in terms of sales, though how many actually exist is another matter. You see, Garriott didn't sell all those he made and some have been given to contributors and helpers in the last few years. These however are not worth that much (selling for $100-200) as they aren't numbered and obviously show no signs of wear or use. None of the original twelve have come up for public sale, making the task of judging just how high the price would go difficult to ascertain. Needless to say, it would quite easily eclipse the mark set by its fellow Ultima game mentioned earlier, and probably any other selling mark, even that of Kizuna Encounter.

Guestimate: £4,000-6,000 (complete)

Life

Bally Astrocade

What is it with consoles and versions of the Life program? Aside from the Astrocade being a niche (but cult, in the US at least) platform, we guess people really wanted to be blasting aliens more than watching cells die. Having said that, whilst just about every other platform died during the great crash, people kept on writing Astrocade titles. Many of them ended up being self-published and self-distributed as was the case here. Written in 1985 at a whopping 2Kb in size, it was lovingly crafted into cartridge form and sold with a simple dot-matrix like label on the front. In all fifteen cartridges were manufactured, and many Astrocade collectors say this is one of the most important titles to have in a collection.

Guestimate: £60-100 (loose)

NCAA Basketball 2k3

Nintendo GameCube

Now I know what you are thinking here. How can a game on a current format be rare? Well there's a multitude of factors to consider. Sega's sports series, whilst considered at least as good as EA's franchises, did not sell as well. Coupled with the fact that the GameCube is the least successful format for sports games overall; this was a college basketball title as opposed to a proper NBA release; and Sega's sudden need at the start of 2003 to reduce some of its deficits, meant this game had a short life. It was released on the shelves in the US near Xmas 2002 and promptly disappeared less than a month later. There are no indications on just how many copies were made, but figures show under 6,000 have been sold. Hence it is one of the few titles for a current system that sells for as much, if not more, than the original price you would have paid for it.

Guestimate: £30-50 (complete)

Rakugaki Showtime

Sony PlayStation

Well you knew one Treasure game was going to be featured in this article. A game very much in a similar vein to Capcom's Powerstone, it involves running around as a small animated figure trying to beat up other small animated figures. Why the game is so hard to find is a bit of a mystery, the only clue being an alleged lawsuit against Treasure that forced it to withdraw the game soon after it went on sale in Japan. There are a number of parodies of existing characters within the game, which is possibly what the problem was all about. What is known is that there are far fewer copies of this on the market than Radiant Silvergun or Bangia-oh.

Guestimate: £80-120 (complete)

Entex Adventurevision

A games console? This entry encompasses both the console itself and the four games that were released for it. Yes, you read that correctly, four. In 1982, Entex Industries released its own portable video game system, probably as a competitor to the Vectrex. Bundled with Defender, it utilises a dot matrix and a spinning mirror to achieve an effective resolution of 150x40. Think of it as a pre-Virtual Boy in some ways; the display was purely red, only ran at 15fps and definitely made your eyes hurt after a few minutes. Although the machine and the games were cheaply priced at the time (you could have bought everything for just over $100 back then) it didn't sell. Hence it is incredibly rare today to find anything to do with it, even on eBay. It also has a tendency to break down fairly easily. Definitely one for the retro collectors who like something a bit different.

Guestimate: £80-100 (games), £400-600 (console)

Great Giana Sisters

Akalabeth

Life

NCAA Basketball 2k3

Rakugaki Showtime

Entex Adventurevision

eMag

DOUBLE TROUBLE

In 1987, videogame violence was reborn, and its name was Double Dragon. The first side-scrolling, two player co-operative beat-em-up emerged to slap the gaming world in the face, then grab it by the hair, knee it repeatedly and throw it into its buddies. Spanner Spencer was there, his mates were there, and their pocket money was in the machine where it belonged...

Double Dragon was the streetwise son of Technos Japan Corp, and the origins of this famous fighting game are set in a poky Japanese apartment, wherein dwelt three ex-employees of the Data East Corporation. The trio lived out the nerds dream by reinventing the beat-em-up genre in 1984 with the classic one-on-one fighter, Karate Champ.

Utilising an unusual control system – two joysticks and no buttons – Karate Champ gave a great feeling of pseudo-skill, and as tension rose, the cabinet would get wrestled and bounced all over the place, what with having two handles to batter it with instead of just one. Snapping karate suit sound effects, harsh samples of Japanese fighting speak from the sensei (who looked not unlike Bobby Ball) and blood hungry cheering from the crowd gave the game an unparalleled atmosphere.

In 1986 a future Japanese legend was introduced with Technos' next fighting extravaganza, known in the West as Renegade. The localised version that most of us will be familiar with starred a blue jean rebel on a mission to rescue a distressed damsel while mercilessly thrashing the criminal class. In the original Japanese version, entitled Nekketsu Kouha: Kunio-kun (translated as 'Hot-blooded Bad Boy Kunio') our hero sets about defending his ginger-haired friend Hiroshi, who is regularly assaulted by various rival gangs outside the school gates.

A two-screen play area was the battle ground for young Kunio to thwart the approaching gang members with some classic new concepts in videogame fighting. A bit of practice with the slightly awkward controls and the player was awarded with an arsenal of kicks, punches, knees and throws, as well as being able to sit on the unconscious miscreant and punch his face into custard.

Although Nekketsu Kouha: Kunio-kun was never placed on an especially high pedestal, Kunio was clearly the inspiration for the two hardest brothers of the beat-em-up world, Billy and Jimmy Lee.

Enter the Dragon

1987 saw the release of Technos Japan Corp's crowning achievement, Double Dragon. Still labouring from a one room apartment, the startling new concept of a two-player fighting game was to provide enough funding for the company to relocate to professional premises. Technos was now in a strong enough position to release the game itself in Japan, but granted worldwide publishing rights to old campaigners Taito.

Double Dragon quickly established itself as the hottest game of the year, with punters lining up across the world to take on the roles of Billy and Jimmy. The Lee brothers fighting style – Sou Setsu Ken (the Twin Intercepting Fist) – is more than a little reminiscent of Kunio-kun's. Obvious graphical similarities aside, both games contained Technos' signature fighting moves – reverse attacks, grabbing and throws. Even in its later, lesser known games like The Combatribes and Shadow Force, gameplay was built on these imaginative, brutal foundations, all having evolved organically from Technos' early games. The only shortcoming in Double Dragon was the absence of Tehcnos' other favourite move – ground fighting. In recompense, it introduced a concept that would revolutionise video game violence forever – two-player co-operative fighting.

This is what really made the beat-em-up fanatics take notice. Battling side by side with a fellow arcade warrior was the one ingredient missing from the fighting fans arcade experience. It didn't take long before an unspoken bond was formed with a fellow pugilist, covering each others backs, strategic combination attacks against the bosses, even sharing credits. Double Dragon transformed the arcade from a bitter arena of self preservation into a promised land of comradeship in the face of adversity, teaching a desperately needed discipline of camaraderie to a vengeful youth. The arcade became a dojo.

Out for justice

The game opened with a cutscene that managed to instil a thirst for revenge within ten seconds of the coins hitting the money box. Billy Lee's girlfriend, Marion, stands alone on the street (let's not ponder why) and is approached by several salacious types, including the Black Shadows leader, Big Boss Willie. Generic thug 'Williams' walks up and gut punches Marion without saying a word. She folds like an old five pound note, then Williams slings her over his shoulder and carries her off to Willie's lair. Roller shutters immediately rise with a clatter revealing the Lee brothers, and a guttural roar from Billy's red hotrod sounds a challenge to any Black Shadow thug to come and face harsh retribution.

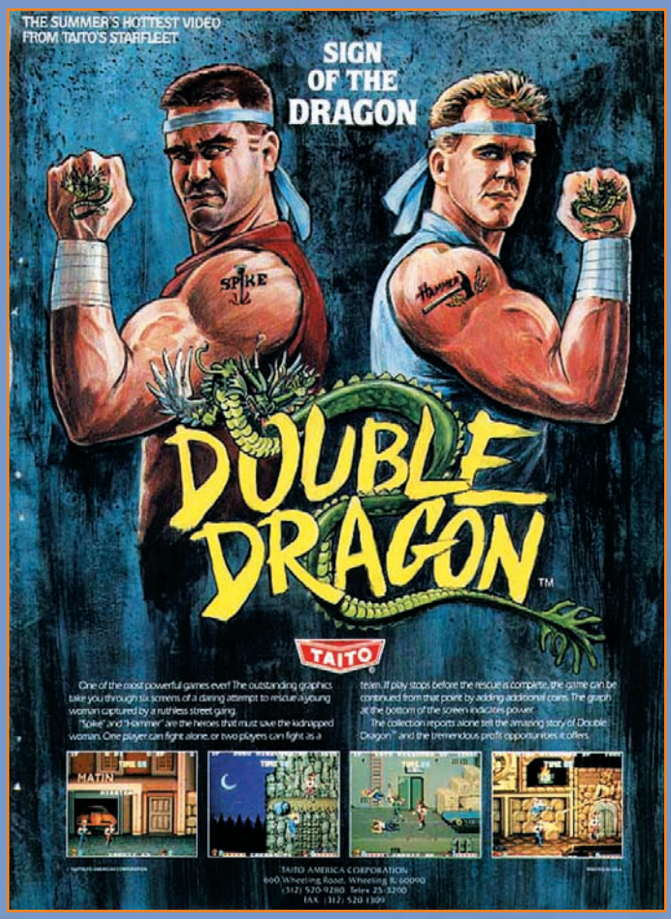
Nekketsu Kouha: Kunio-kun, top, and Renegade, the Western version, below

This was before the days of Final Fight and the single attack button it introduced, whereby the software automatically performed the characters' impressive attack sequences. In Double dragon, players were required to learn the specific button and joystick combinations in order to master the Dragons' fighting style. Once these were ingrained into the player's memory, Billy and Jimmy were able to perform flying kicks, head butts, jumping back kicks, a reverse elbow smash, throws, hair grabs and any combination of these sensational moves, enough to satisfy the most ardent sadist.

Technos' Karate Champ, one of the earliest examples of a one-on-one fighter

If that wasn't sufficient, considerate enemies would regularly sport rudimentary weapons that could easily be turned against them.

Other fighting games up to this point had allowed players to make use of fairly typical weapons, usually some type of bludgeon. Technos was no different and baseball bats, whips and knives were all present to be used by



The original Japanese arcade flyer introduces Billy and Jimmy Lee, while for some reason Taito of America renamed the brothers Hammer and Spike!

either the good or bad guys. The game took an imaginative slant toward the unusual when characters decided to pick up an oil barrel and hurl (or kick) it across the screen. Anyone in its path, whether they were the intended target or not, was bowled over. Large rocks were similarly utilised and Williams could often be caught throwing sticks of dynamite about the place. If the Dragons were quick enough these could be scooped up and thrown back, though usually going off in your hand. Most enemies seemed to forget all about the explosive the second it had been cast away and would casually walk over it as it exploded. With a little timing, this could be exploited by the Dragons as yet another stylish way of taking out baddies.

Sound and vision

While Double Dragon's imagery is perfectly acceptable and recognisably stylised (and a significant improvement on Kunio-kun) it has never stood out as being visually stunning. Backgrounds were well stocked with detail and Technos made excellent use of its pioneering isometric 3D play area, building a map that, while linear, included lots of ups, downs, jumps and pitfalls. Overall, artist Koji Kai and his staff were successful in realising the Dragons and the world they fought in.

Yamane Kazunaka's electronic rock soundtrack was a major factor in Double Dragon's atmosphere. The main theme was an ascending mantra of defiance, keeping the players' heads held high, instilling a sense of righteousness in the ensuing conflict. As the first mission closed and the heroes tallied up their bonuses, the gravity of mission two is realised by a progressive, ominous bass line, reminding the vengeful brothers that their journey had only just begun. Each mission is equally enlivened by the work of Yamane, and was actually published as a soundtrack on tape, entitled 'The Original Sounds of Double Dragon'. And rightly so, for without Yamane-san shoring up the emotions, no Dragon would ever have found the mettle to wade through the river of ill-intent that was the Black Shadow Gang.

The game wasn't exactly replete with enemy characters, but thanks to game designer Shinichi Saitou, those it had were no ordinary mindless drones. Adversaries from Double Dragon shared an intellect with those populating Kunio-kun's world. Neither Kunio nor the Lee brothers were fortunate enough to face a thug who would run mindlessly onto a clenched fist. The enemy would always retreat when faced by one of our champions, preferring an approach from the rear followed by a thoroughly unfair multiple assault, fully confirming their nefarious intentions. This all gelled beautifully with the game's unique

Having saved Marion from Big Boss Willie, sibling rivalry takes on a whole new meaning as the brothers battle to the death

'rear' fighting abilities, allowing the seasoned professional the opportunity for a sensational Jackie Chan style rumble.

After infiltrating his lair and facing down Big Boss Willie (and his rather unsporting machine gun), Technos put one final magnificent spin on its masterwork. The two players who have warred side by side through adversity and peril must now face each other! Nowhere in the fighting genre is there a more highly charged and even handed fight. Only the ultimate champion, after felling his own brother, is rewarded by the hand of the promiscuous Marion. The rope she is suspended by drops her safely to the floor so she can totter over and plant a kiss on the only man left standing.

Also, you get to check out her pants.

Bloody revenge

A follow-up was inevitable, but recapturing the glory of Double Dragon was no small task. One year after the release of the original and the subsequent success of the home versions, Double Dragon II: The Revenge appeared on the sticky arcade floor. Technos published the game globally itself, still on top from the vast profits awarded by the original.

It could reasonably be argued that this wasn't so much a sequel as an enhancement of the original. Graphics were cleaned up and given new palettes, and most characters were awarded a revamped look and spruced-up animations. More of a shift to the side than a step forward, the sequel received a tepid reaction from the fans.

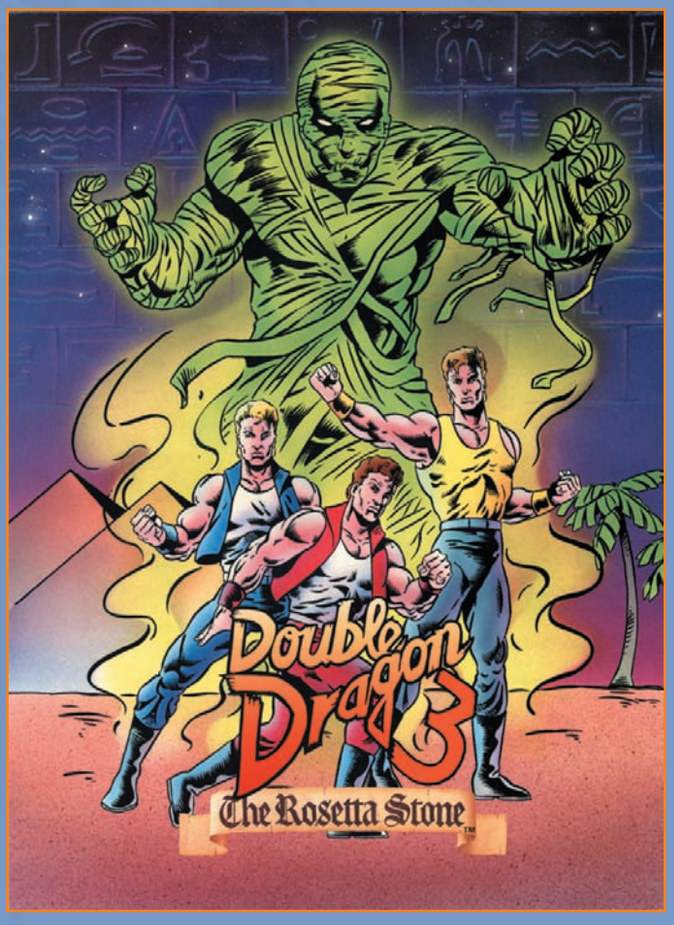
This time out, the brothers' mission is not one of mercy, as the opening scene sees Big Boss Willie gunning Marion down on the street where she so often loiters. It's revenge alright. Business had presumably been lucrative at the Lee household, as the roller shutters now rise to reveal not a sporty hotrod, but a shiny red gunship. As before, one or both of the boys emerge from the garage to bring bloody justice to Marion's returning assailants.

Along with the other updates, enemies and weapons received an overhaul. Whips were now ball and chains, bats were shovels, dynamite was now a grenade and oil drums were swapped for wreaking balls. One of the new enemies, Chin Tai Mei, had some rather unfair escrima sticks (as used by Sly Stallone the beginning of Rambo III) that make him trickier than Big Willie himself. Being a sensible fellow he never lets go of them, so you unfortunately never get to have a lash with these impressive tools.

Old adversary Abobo appears often enough, and has apparently spent the year since we last saw him obtaining a diploma from the Liz Taylor School of Fabulous Wigs! Other new larger than life bosses are Burnov (who wears iron bondage gear and picks you

In the sequel, Jimmy appeared to have swapped his credible red suit for a white 'Saturday Night Fever' number.

DOUBLE DRAGON II
The Revenge
AVAILABLE EXCLUSIVELY FROM AMERICAN TECHNOS AND ROMSTAR INC.
AMERICAN TECHNOS INC.
A SUBSIDIARY OF TECHNOS JAPAN CORP.
AVAILABLE IN DEDICATED FORM ONLY!
AVAILABLE IN 19" & 25" MONITORS



Massive global earnings from Double Dragon ensured that sequels were just around the corner

›Series spin-offs

The first issue of Marvel's Double Dragon comic. 'Stan Lee' was later introduced as the father of the family

Thanks to the series' huge popularity both in the arcade and at home, commercial vultures were circling over Double Dragon in their plenty, and first to pick at the bones was Marvel Comics.

A six part hack using the Double Dragon name to push some pretty dreadful comics ran from July to December of 1991. The brothers in the comic got their 'power' from a large green dragon statue, Marion was an undercover cop, all the popular enemy characters had been replaced, and the city they lived in was called Oligopolis! Issue three also introduced a new character, the father of Billy and Jimmy, named (you guessed it) Stan Lee. He was even drawn to look like a trim version of The Man himself. If this was a joke, it was a good one. If not, then – damn.

In all fairness, the artwork was good, but the dialogue was painfully poor. The Lees first venture into multimedia took more of an influence from The Rosetta Stone than the original classic game, and it was only a sign of things to come.

In 1993, the Double Dragon cartoon was aired. The producers had decided to aim the show at a pre-teen viewer, who was unlikely to have any knowledge of Double Dragon's history, while fans found themselves watching a typically tame, politically-correct after-school show.

The cartoon story was closer to the NES home version where the Shadow Boss turns out to be Jimmy Lee, separated from his brother at birth and raised by the Shadow gang. In episode two, the lads have themselves a fight and Jimmy decides to turn his fist to a more righteous cause. Here it is decided that the twins get their power from the mystical Dragon Sword that splits in two when the brothers reunite, and transforms them into the Double Dragons. Perhaps it wasn't all bad as it did manage to hang in there for two series, but the sad truth is that it was just another watering down of the great game, further removing Double Dragon from its origins. The cartoon did however give birth to a toy range. So far, they haven't set any records on eBay.

By 1994, Double Dragon was seemingly dead, when suddenly a movie was announced. Directed by James Yukich, and starring Scott Wolf and Mark Dacascos as Billy and Jimmy respectively, the franchise had hit rock bottom. This time out, the brothers derive their power from an ancient medallion that had been split in two. Should the evil Koga Shuko (the gang leader in place of Big Boss Willie) get his hands on both parts, the world might be in some kind of peril or something. Fortuitously, the Dragons own the other half, and in the process of protecting it discover their true potential as virtuous warriors. It was bad, and not even enjoyable in a bad b-movie kind of way.

up by the hair) and an unidentified behemoth at the end of mission two who looks like a cross between Arnie and Russ Abbott's incoherent Scotsman, Jimmy.

After laying down Big Boss Willie, for some unexplained reason two purple apparitions identical to the Lee boys emerge from the floor and do ghostly battle with the vengeful brothers. What with the sequel's enemies being blessed with superior AI, it makes for a worthy skirmish, though it does lack the tension of the original's final bout.

The revised control system took a prompt from Kunio-kun, utilising its directional attack button scheme. If the character is facing left, the left button punches and the right button back kicks. Face right and the button operations are reversed. In essence this was a reasonable method, though getting used to it perhaps took a little longer than the player's perseverance with The Revenge would allow.

Although this sequel suffers from being an eighties child, it is probably the game Technos was trying for with the original Double Dragon. Its superior points are easy to overlook, yet it is apparent that this game is more closely related to the excellent Double Dragon Advance recently released on the GameBoy Advance, lending weight to the theory that Technos felt it to be the more complete of the DD adventures.

Three's a crowd

The series continued in 1990 with Double Dragon 3: The Rosetta Stone, a profiteering, contemptible offering developed by East Technology (but published by Technos, so it can't be entirely absolved for this travesty) that used an in-game shopping system, whereby the player actually had to feed the machine coins in order to upgrade the character's moves! In retrospect, the game's back story was the beginning of the end for the franchise.

The story tells of how the Lee brothers travelled for two years to complete their martial arts training, and on their way home met an old fortune teller named Hiruko. This wizened old girl points a gnarled digit at you as she tells of how a great enemy has arisen, and you must gather the Rosetta Stones before going off to Egypt to fight this diabolical foe.

She qualifies this by saying no one has ever returned alive. In the previous games, motive was clearly established during the opening scenes and the Dragons set forth with morality on their side. This time it seems they just want to make trouble by travelling the world and brawling with random tough guys.

Story aside, the game is far enough removed from the esteemed qualities that made the franchise so successful as to create a completely new and independent failure. Badly drawn sprites, nebulous gameplay and animation so jerky it could induce a seizure meant that no amount of good ideas could save the game. And it did have some good ideas, even if they were never properly realised.

Depending on which cabinet you were using, two or three players could fight side by side. Player three was named Sonny, a yellow suited version of the Lee brothers. It was never established whether he was any relation to the Dragons, but his style (or lack of it) suggests some affiliation to our heroes. The shopping system allowed players to purchase extra characters (who only came into play when your current fighter dies and you graciously add another coin to continue), such as a burly wrestler named Roney, a chubby kung fu boxer named Seimei, a guy in a karate suit named Kunio (only similar to the Renegade/River City Ransom character by name) and a Judo practitioner named Masao.

Two and three player combination moves could also be performed (if you could afford

The GBA version of Double Dragon is essentially a revamped version of the arcade with additional missions and new moves

them), which would have been a pretty spectacular addition to any other game, and quite within the spirit of the original Double Dragon concept. But not even the available samurai sword or set of nunchaku could save this shallow mutation of the old classic.

One on one

The final time Double Dragon was to be seen in an arcade cabinet was in 1995, five years after the release of Double Dreadful 3. Of course, this was after Street Fighter II had sent shockwaves through the beat-em-up world that had not been felt since the original Double Dragon.

Like Double Dragon V: The Shadow Falls, a home update released for the SNES, Mega Drive and Jaguar the previous year, Double Dragon on the Neo Geo was a straight-up one-on-one fighter. Characters were gleamed from the previous games as well as those only seen in the atrocious movie license, such as the final boss Koga Shuko.

This was Technos' first attempt at a Neo Geo game and was altogether not bad. The graphics were bright and flashy and the characters were recognisable, showing off the legendary arcade console very well. The Lee brothers had received a stylish make over, successfully lifting them out of the eighties with hooded tops and jeans. While it bares no resemblance to the game style that made the franchise so popular, it was a fine SFII clone and a natural choice for Technos to cut its teeth on with the much beloved Neo Geo. The game was later ported to the PlayStation but only released in Japan.

Sadly, in 1996, after the disappointing reception of its Neo Geo titles in the arcades, Technos Japan Corp filed for bankruptcy. The company's assets, including the Double Dragon franchise, were acquired by Atlus Games. Technos' ex-staff now work for Million Inc. (a subsidiary of Atlus) and continue to produce games across different platforms. Most recently, the old crew worked on Double Dragon Advance for the GBA – the first true-to-arcade conversion with twice the amount of missions, fantastic new moves (including ground fighting), and all the best features from the many spin-offs, beautifully melded together and tempered in the forge of the once great Technos Japan Corp.

›On target

Target Renegade was an unofficial sequel to Technos' Renegade, developed by Imagine in 1988 for the 8-bit home computers. If you were hooked on Double Dragon and devastated by the inferiority of the home conversions, your salvation was at hand.

Consisting of the same components as Renegade (rather than Kunio-kun) but in Double Dragon's style, this was a superb halfway house between the two games. Two players fought alongside each other through five levels of thugs, dogs and hookers to finally thwart Mr Big, the local crime lord.

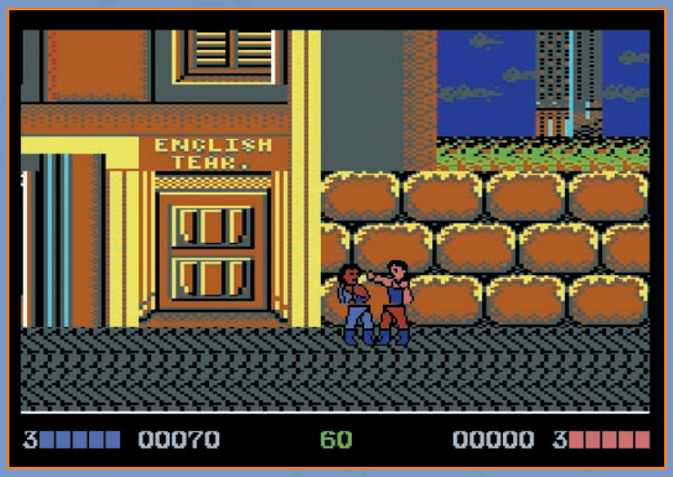
The moves were plentiful and easy to locate, even with the joystick and single fire button. Characters were all unique and full of flavour, and with a good supply of weapons (crowbars, sledge hammers, axes) the action was non-stop. All systems sported an equally playable version, although the Commodore 64 version came out on top thanks to its excellent graphics. Where Double Dragon failed at home, Target Renegade was there to take up the slack (and then some).

The Rosetta Stone was a poor second sequel, and the shopping system smacked of greed

No doubt due to the success of Street Fighter II, Double Dragon was re-launched as a typical one-on-one fighter

Nintendo Entertainment System

Sega Master System



Commodore 64 (Melbourne House version)

Commodore 64 (Ocean version)

>Coin-op Conversions

Christmas 1988 and the queues temporarily moved from the arcade to the game shop, where home versions of Double Dragon were available for a variety of systems. But did any of them come close to matching the thrilling original?

Nintendo Entertainment System

Technos itself handled the NES port, and while it did lack certain aspects (unforgivably, the two player mode was removed) the kindest thing that can be said about this version is that it reproduced the feel of the original reasonably well.

Enemies couldn't be stunned, so even if you were laying into them they continued to punch back. Energy is steadily drained by this glitch, which can lead from mild frustration to an all out hissy fit. Extra levels, a revised fighting system and a different end boss (who turned out to be Jimmy Lee) made for a respectable game, just not the one you might have wanted. To make up for the lack of a co-operative two-player mode, an secondary one-on-one fighting game was included, with each player being able to choose from one of six Double Dragon characters.

A more or less direct port of the NES version appeared on the GameBoy, although some of the levels were curtailed presumably due to memory restrictions.

Sega Master System

As usual, Sega developed and put out its own conversion. This would probably be the best 8-bit version if the gameplay wasn't quite so frustrating. Just like Technos' home version on the NES, Sega was unable to reproduce the characters interaction and intelligence. While the importance of this aspect is perhaps not immediately obvious when playing the arcade original, it is severely noticeable in its absence.

Graphics are clean and recognisable, if a little 'cartoony', and it would have been nice to see some of the larger sprites the SMS was capable of. Sega at least kept the two player co-operative option, which is the crux of the game. The four levels are faithful to the arcade, as are the

Amstrad CPC (464 version)

Amstrad CPC (6128 version)

Sinclair Spectrum

Atari 2600 version

moves and enemies, making this the closest conversion available for a 8-bit home system. It was only really superseded by the Mega Drive version which appeared years later in 1992.

Commodore 64

The original Melbourne House version of Double Dragon was so bad it could give you nosebleeds. It was almost like the developers (Binary Design) hated the original and set out to rubbish it. No music during the game and the worst collision detection ever seen (the programmers even mentioned this painful glitch on the inlay card!) removed any trace of playability. The few moves that were available were so awkward that straight punching was the only real option, coupled with wimpy enemies meant five minutes of bashing the fire button followed by ten minutes of waiting for the next half of the level to load.

In 1991, Ocean Software developed a much improved version for the C64, but it was never officially released, appearing in limited quantities at computer shows instead.

Sinclair Spectrum

Converting an arcade game to the Spectrum went beyond programming, and became an art form in itself. For that reason, you could almost forgive software houses for turning out sub-standard conversions. So there was no real excuse for Binary Design to flop with Double Dragon.

By no means was this as bad as the C64 port, and pretty much worked up to the limits of the system. While all the moves, levels and enemies were present (although Abobo looked like a Russian circus strongman) the game fell down on its rough programming. Spectrum users didn't expect fancy graphics, but they did demand playability, and Double Dragon failed to deliver. It was never going to be amazing, but it should (and could) have been better.

Amstrad CPC

Two completely different versions for the Amstrad CPC were released, one good and one bad, and both were credited to Binary Design! The good version was designed to run on the CPC6128 and was a very decent all-round conversion, featuring extra enemies and a ton of weapons. The only gripe (more of a peculiarity, really) was the gaudy colour pallets, with the programmers seemingly painting the scenery in digital vomit.

The bad version was released for the standard 64Kb CPC and suffered from being a straight port of the Spectrum version. If anything though, it was even slower and more frustrating. In a race between this version and the C64's, our money would be on players lobotomising themselves before the votes could be counted.

Atari 2600

The 2600 was designed for playing games like Defender and Pong, yet Activision miraculously managed to squeeze out a recognisable version of Double Dragon. Graphics were as good as could be expected – blocky but clear with some nice backgrounds. Weapons could be used and there was a nice approximation of the theme tune playing. Features like the two-player co-op mode and a one-on-one verses game were also included.

What with the quality of the other home versions, this one actually stands up as something of a success. Activision made a real effort and pushed the machine to its limits. A version was also released for the Atari 7800, with graphics nearer the quality of those seen in the NES and Master System versions. Both versions are now quite scarce, making them sought after collectables for the Double Dragon fan.

Since the birth of the computer and console gaming phenomenon, fans have witnessed some bizarre software and hardware creations. Retro Gamer investigates the illegitimate, hacked and bootlegged underworld of retro gaming

Altered States

Back in the heyday of computer and console gaming piracy was rife and the fledgling industry seemed to have few answers to the problem. Whilst kids swapped games in school playgrounds all over the world, and did tape-to-tape copies of the latest releases, rampant Southeast Asian professional bootleggers made serious money in their home markets.

These days, effective copyright legislation and the willingness of companies to vigorously protect their intellectual property has somewhat lessened the problem. That said, necessity is the mother of invention, so it's unsurprising to see that hacked software, bootleg cartridges, copied disks and cloned consoles can still be bought for retro favourites like the NES, SNES, Mega Drive, GameBoy, Atari 2600 and others. And, whilst it's easy to argue that some of the underground initiatives like game hacking are harmless, it's impossible to justify the plethora of fake consoles that dominate the Chinese market or the multi-game bootleg cartridges that have blighted the gaming scene for years.

However, closer examination of the phenomenon reveals that the last two decades have borne witness to some truly devious and downright clever work that has seen pirates earning a decent living off the work of others.

ROM hacks

Whenever you have something complex and mechanical, someone's always going to want to take it apart and see how it works. Whenever you have something long and involving that in some way ends, someone's always going to want there to be more of it.

Those two tendencies dovetail neatly in the field of ROM hacking, where fans use homebrewed software to add to or modify their favourite games. With the help of a hex editor and some emulators, you can alter the graphics, sound, characters, and gameplay of a classic game.

With the advent of the Internet and readily available emulation software, it's become a lot easier for broke students and interested hobbyists to hack ROMs. The results have been mixed at best; like a lot of things on the Web, it's like digging for gold. While a lot of hackers have taken this opportunity to add gratuitous blood, 8-bit nudity, or bizarre new textures to their favourite games, others have created entirely new levels for classic titles or translated Japan-only releases into English.

It's not quite fully legal and the results are frequently of questionable taste, but ROM hacking is one of the more interesting subcultures within the so-called gaming community. If you've got a few simple emulators and some time to kill, ROM hacks can make an old game feel brand new. Whether it's a larger and tougher overworld for The Legend of Zelda, a whole new level for Donkey Kong, or the simple addition of a freeplay mode for your MAME ROMs, ROM hacking has produced and will continue to produce some impressive results.

Nintendo consoles are the weapon of choice for most hackers, and perhaps fittingly, the Mario titles win the award for 'most hacked' games

Using emulators like NESticle you can apply simple hacks to your favourite games. Here we've messed around with the colours of SMB

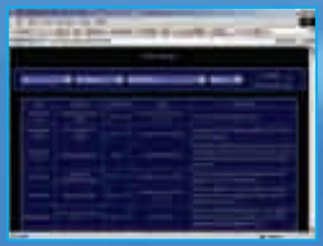
Getting started

A full blown how-to is beyond the scope of this feature, but here's a simple introduction to hacking a NES game. To get started, you'll need some software. Pick a game you want to work with (make sure you own the original, ahem), then go online and find a working ROM, along with an emulator to play it.

Many modern emulators, such as NESticle, already include hacking tools. For example, pause the playback of a ROM in NESticle and press F4 to View Palette. This'll let you play with the game's colours. Want to turn Mario green and pretend he's from space? This is one way to do it.

With a bit of work, you can find a variety of programs online that can help you mess around with ROMs. In order to design entirely new levels, you'll need a hex editor such as Hex Workshop, which will translate a ROM's binary files from unusable and unreadable text to hackable hex code. This is the best way of altering a game's graphics, but it tends to require a great deal of double-checking and reloading.

Here's a simple example of how to change some text. Let's say we're playing Super Mario Bros and we want to rewrite the text on the title screen. Launch the ROM in NESticle, and when the title comes up, pause the emulation. Press F2 to check the game's tiles, and write down each letter's hex files. Now, open the ROM in your hex editor and change the files as you see fit. The ROM won't let you write anything longer than the original statement, but that gives you a bit of leeway.



Generally regarded as a benign pastime, the Internet is littered with sites dedicated to hacking old console games

Obviously, this isn't a process for the faint of heart or the easily bored. You can pull off relatively simple hacks in a surprisingly short amount of time, especially with the right emulation software, but the more complicated you intend to get, the more intensive this will become. Some of the larger mods have been years in the making.

For more specific details and tutorials, take a look at **www.romhacking.com/docs/gendocs.php** and **www.jeffsromhack.com/toolbox/index.htm**. Many of the more popular hacks, meanwhile, can be downloaded at Zophar's Domain (**www.zophar.net/hacks**) or Aeon Genesis Translation Projects (**http://agtp.romhack.net**).

›The best ROM hacks

There are many, many ROM hacks waiting for you to try out there in the wilds of the Web. Most of the hacks that can be easily found on the Internet are NES or SNES titles, and this selection reflects that bias. While there are a growing number of hacks for arcade, Megadrive, and GameBoy titles, right now they're not nearly as common as hacks for the classic Nintendo consoles.

Super Mario Remix II

This is a good example of how a hack can give a total facelift to a game, changing almost every aesthetic element while retaining the same gameplay. Super Mario Remix II turns the classic Dragon Warrior for the NES into an 8-bit Mario RPG, with an entirely new plot. The sequence of events for Dragon Warrior remains pretty much the same, but this version of the game has a totally different flavour to it, thanks to the Mario-themed content.

Girls' Night Out

There are a lot of hacks for the original NES Final Fantasy, but this one really seems to capture the essence of hacking a game purely for personal satisfaction. While the classic gameplay for the original remains the same, the graphics and a lot of the text have been changed to reflect the fact that the Light Warriors are now the lovely Lady Warriors. This concept adds a certain level of silly fun to what is otherwise a long and grueling RPG.

Metroid Remix

There's an entire school of ROM hacks dedicated to leaving the graphics of a game the same, while changing around the level maps and increasing the difficulty. Metroid Remix is a pretty good example of that genre, and it even throws in some new text that makes the hack feel like a sequel to the original. All of the maps for this Metroid are different, and all of the items have been moved around. Good luck – you'll need it.

Legend of Zelda: Curse from the Outskirts

This game is from pretty much the same genre as Super Mario Remix II, only backwards. Instead of turning a classic RPG into a Mario game, it turns the original Super Mario Brothers into a demented side-scrolling Zelda game! All sorts of Zelda enemies, new gameplay, and maps nothing like the original SMB make this one a real treat. It's super-challenging too, making this a real test for expert gamers.

Mario Kart Hyper Battle

On the SNES hackers are equally as creative, as the definitive remix of Super Mario Kart proves. Here, all the battle mode maps have been completely re-written, breathing new life into an already classic title. They've not just been thrown together, either. It's clear that the four new maps have been play-tested and bug fixed to perfection by fans of the original game, providing hours of free entertainment.

Strange Mario World

Released in 2000, the passage of four years has done little to dent the charm of this 'enhanced' edition of SBES Super Mario World. By 'enhanced', the hacker clearly means supremely difficult because Mario is now overwhelmed by the sheer weight of enemies out to prevent his progress. New bonus caves abound and though the original graphics are reused throughout, the level designs have been reworked to present a monumental challenge.

›Unofficial ports

On the NES, a number of commercial games surfaced that were produced by pirates looking to cash in on the success of already released SNES versions. These games were not endorsed or licensed by their respective copyright holders and were never coded or released by them on the NES, thus leaving a ready market for the pirates. What surprises is the quality evident throughout, with some genuine underground talent going begging.

Wario Land II

A pirate NES cartridge that actually has nothing to do with the GameBoy version of Wario Land II. Instead, it's actually a hack of Kirby's Adventure. A fun but short lived game ruined by the fact that you start with near infinitive lives. Often hawked on eBay, these carts can be picked up for around £20.

Super Donkey Kong 2

Another SNES-inspired pirate product, Super Donkey Kong 2 takes the best features from Donkey Kong Country 1 and 2 (including the fine graphics) to produce a more than passable NES version. Another rare game, it's difficult enough to find a ROM image, let alone a cartridge bearing the game.

Street Fighter II

This bootleg NES cartridge of Street Fighter II is a port of either the SNES or Mega Drive version of the game. It is generally well executed but suffers from only providing four player-controllable characters: Guile, Chun-li, Zangief, and Ryu. Also, the basic NES controller proves incapable of performing the wide range of special moves required to master the game, which is something of a shame given the fluidity of the action and the surprisingly sharp graphics.

Super Mario World 9

Occasionally touted on eBay, this game sounds more exciting than it actually is. Nothing more than a tweaked version of Adventure Island 2, with Mario playing the lead roll and the weapon of choice now being fireballs rather than axes, there's little here to hold the attention. Even Mario's trademark baddie stomp has been removed.

Family Kid

Despite the ambiguous title, Family Kid is a shameless Sonic 'tribute', with the only differences between this and Sega's version being the lack of save points and continues. The game also runs a fair bit slower than its Mega Drive cousin. Nonetheless, if you must pervert history and play Sonic on your NES then this cartridge is the one to hunt down.

Sonic the Hedgehog 4

This 24Mb cart, in which Sonic has to rescue a caged and defenceless Mario, demonstrates the sort of barefaced cheek that had both Sega and Nintendo executives running to their lawyers. Legalities aside, the game is certainly worth revisiting under emulation, if only to witness for yourself what all the fuss was about.

›Interview with Jeff Kulczycki

Jeff Kulczycki runs Jeff's ROM Hack (www.jeffsromhack.com), a website dedicated to how-to guides for personalising and hacking classic arcade ROMs

Jeff's website contains links to tools which you can use to hack away at games

Retro Gamer: What got you started hacking arcade ROMs?

Jeff Kulczycki: I got interested in ROM hacking after I bought my first arcade game a few years ago. It was a non-working Dragon's Lair. I thought I could get it working again – if I just understood how the program worked. I've always enjoyed assembly programming, ever since I was a kid messing around with my Commodore 64. Today it seems that programming in assembly is sort of a lost art. I was surprised at how it all came back to me when I started tinkering with these old games. Most people who collect arcade games like to know everything there is to know about the game, including how the code works. It helps you troubleshoot the game if it ever breaks.

RG: Tell us about some of your projects.

JK: I've helped Dave Hallock (at www.dragons-lair-project.com) write new code for the additional Dragon's Lair footage that was re-released. That was a fun project. My other projects involve other games that I own. I thought it would be cool to add "JEFF'S ARCADE" to all the title screens of the games, just to show off to my friends, and if the game doesn't have a freeplay mode I usually add that too. If there is lots of 'room' left in the ROM chips then sometimes I add a diagnostic mode if the game doesn't have one. (I did this recently to my Frogger – you never know when something's going to go wrong with your game.)

RG: What software would you recommend to a beginner?

JK: My only recommendation is to get a debug version of MAME. It's the best way to be able to watch variables and such while the game is running. You can get a good idea of when routines are run and when and where variables get changed. It's a great tool. My hat goes off to all the people who helped write it. MAME is also a great way to try out your changes. Without MAME you'd have remove the EPROMS from your game, erase them with a UV eraser, reprogram them and reinstall them. It's a lot of work, especially if you're fixing a lot of small things. With MAME you can test your new changes in seconds.

RG: What tips would you give a beginner who is interested in ROM hacking?

JK: The best thing for someone who is just getting started hacking is to start on a game that you know really well. The more familiar you are with a game the more likely you'll be able to understand the code when you disassemble it. Of course the other important thing is to have good knowledge of assembly language programming. Most games use the Z80 processor, so you should be familiar with the Z80 instruction set. And once you get the basics of how a game is laid out, or structured, you'll find that other games can be quite similar.

Jeff is the author of the emuLaser laserdisc emulator and is also a member of the Dragon's Lair Project advisory panel

Pirate consoles

When the videogame industry was in its infancy back in the 70s and 80s, it just wasn't viable for manufacturers to launch their machines in certain markets or territories around the world. This led to a thriving third-party licensed hardware scene that saw independent companies pay for the right to launch clones in certain countries. However, the official absence of the likes of Nintendo, Sega or Atari in some areas of the world also meant that unscrupulous pirates could have a field day ripping off legitimate technology and passing it off as their own.

The situation was further complicated by tech-minded folk who reverse engineered machines, and having got to grips with the hardware under the bonnet, went on to release 'clones' that contained no proprietary hardware or software but were nonetheless (to varying degrees) compatible with the original machines. This produced a legal grey area that many companies took advantage of. Once again, the NES was targeted more than most, with numerous 'Famiclones' flooding the market, but the Atari 2600 and Sega Mega Drive also spawned a host of imitators, proving once and for all that if a product is successful then it's definitely worth ripping off! Here are six of the most interesting clones:

Unitech Nes

A shameless rip-off of the design of Sony's PlayStation, this sturdy machine is in fact just one of many NES consoles being sold in sheep's clothing. Featuring a decent selection of built-in games, it's difficult not to appreciate the cheek of this aesthetically-pleasing clone.

FX16

Is it a Sega Saturn, or a Dreamcast, or a hybrid of both? In fact, it's neither, preferring just to rip-off the design of those machines whilst housing a Mega Drive and built-in games under the bonnet. Extremely rare, it's surely worth picking one up for the novelty value alone.

Studyplan

This sexy looking beast is a quirky piece of hardware from start to finish. Designed for the South East Asian market, its primary function is to teach English via the included software. As an added bonus it happily plays audio and video CDs, and will also play pirated Sega Mega Drive ROMs.

GameBoy Clone

Why anyone would wish to clone the original GameBoy when newer, sleeker, faster colour versions are available is anyone's guess, but that didn't stop Fortune Power Industries of Taiwan producing this unit that claims to be 100% compatible with all licensed Nintendo games and peripherals.

The Russian Dendy

So popular was this NES clone in the former USSR that the term 'Dendy' has now entered into common parlance as a generic term used to describe all home videogames. It's a good job that Russian trading standards officers never stepped in over the manufacturers' ridiculous claims that the console housed 10 million games. There were in fact only eight – yes, that's eight, not 8 million.

720 Famicom

This beast of a machine favoured 100% NES compatibility over looks and came with a 42-in-1 cartridge as part of the package. Occasionally sold via online auctions sites, if the machine can be picked up cheaply then it's worth its weight in gold. The secret here is that the 42-in-1 cartridge actually houses some of Nintendo's best games and they're all unique, with no hacks or repeats to spoil the fun.

>1,000 games in one console!

Recently, companies such as Atari, Namco, Commodore and others have begun repackaging their ageing consoles and games as stand-alone joysticks that plug straight into your TV. It's hardly a new phenomenon, though – pirates have been doing it for years.

The SuperJoy – just one of the many NES clones available

These days, you'd be hard pushed to visit a market or car boot sale without seeing a variety of hard-moulded, garishly-coloured, poorly-designed joysticks that boast that they plug straight into your TV and give access to up to 1,000 different games, all for around £10. What enthusiasts may not have realised is that these devices are invariably pirated NES consoles with added bootlegged ROMs. These joysticks rarely contain more than 30 or so unique games, but bolster that figure with numerous variations or hacks added to raise the apparent number on offer.

Variously sold under the brand names of Gunboy, Mega Joy, LiteStar, Megatronix and New Generation, if you're prepared to splash out upwards of £50 then you can get versions that genuinely contain 200 built-in NES roms, but they're difficult to find and it's tough to sort the wheat from the chaff. In any case, for that kind of cash you might be better off buying a genuine machine and cartridges off eBay.

›Gaming on the go

Retro Gamer caught up with madcap console mutilator Benjamin J. Heckendorn, just as he was taking a sledgehammer to a Mega Drive...

Retro Gamer: Tell us a bit about yourself.

Benjamin Heckendorn: I'm 29-year-old and from Verona Wisconsin, USA. My current job is 'Portable Console Builder'.

RG: Do you have a website?

BH: Sure. I'd invite you to head over to www.benheck.com. The site has photos and stories about all the portables that I've built and also houses technical forums where people discuss the creation and hacking of game systems.

RG: So how did you end up as a Portable Console Builder?

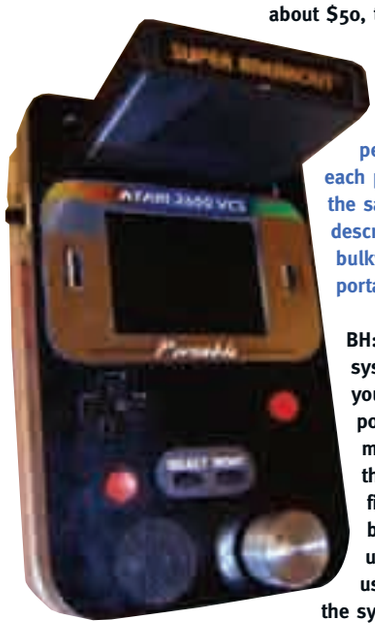
BH: I was a graphic artist for six years and that gave me an insight into design and computerised drawing skills – attributes that obviously help with the process of creating portables. Then I read somewhere that the Atari 2600 was a simple machine, so I figured I could probably 'reduce' its size and make it run off batteries. After doing some tests I realised I could, so I decided to design a custom portable case around it and things took off from there.

RG: So what's in your current catalogue of portable game consoles?

BH: Year 2000: VCSp Original. Year 2001: VCSp Revisions 2-5, VCSp Gold (complete with a big 4in screen – this was also the first portable to use white LEDs for light instead of a TV screen's built-in bulb), PSone portable, SNES portable. Year 2002: VCSp Special Edition (the oak one). Year 2003: Vagabond 2003 (a small Atari 2600). Year 2004: Hand-built NES portable, "NES on a chip" small-sized NES portable, hand-built SNES portable, hand-built PSone portable, hand-built Atari 2600 portable, PS2 portable, Sega Exodus.

RG: What are the typical costs involved in building such a machine?

BH: The TV screen is about $150. The systems usually run at $40-$50 (for the older used models). The routing and plastic comes to about $50, the remainder is for miscellaneous parts and labour.



RG: From a layman's perspective and presuming each project involves essentially the same steps, can you roughly describe the process of turning a bulky old console into a sleek portable device?

BH: First, take apart your old system and hack off stuff that you don't need like controller ports and parts of motherboard with nothing on them. Then you need to figure out what kind of battery is required to run the unit and pick a pocket TV to use. Designing a case to fit the system, the TV and the cartridges comes next. Finally you need to cut out a case or build one by hand, assemble the case and install the console guts inside it.

RG: Are there any consoles that do not lend themselves to shrinking and if so why?

BH: Some obvious ones, like the Xbox. A few 'squarish' shaped systems, such as the GameCube and Dreamcast are problematic as well. Since they're shaped like squares stuff is stacked on top of other stuff, making it hard to 'thin out' the unit. Whereas a PS2 (especially the new one) is quite thin already.

RG: What sort of prices are you selling these devices for?

BH: The ones I build typically go for $300-$400.

RG: What clearly began as an irreverent hobby seems to have taken on a life of its own, with units now becoming available for sale and your first book ('Hacking Video Game Consoles') just weeks from being published...

BH: Yes, it's pretty cool. If I went back in time to when I started doing this (nearly five years ago) and told myself all the stuff that would come from it I'd probably laugh at myself and say 'get outta here you looney!'

RG: Can you explain at what level your book is pitched?

BH: It's pitched at someone with soldering competence who is good with their hands – that sort of experience is all you need. It's a complete step-by-step guide for all the different projects/portables I've created. Four of the projects can be done by hand using common tools and the other four require a routing machine, which some people have or can get access to.

RG: Finally, do you have a 'to-do' list of consoles to tackle?

BH: I'd like to take a whack at making an N64 portable some time, but for a while now I've been working on an Atari 800 computer laptop. It'll contain an Atari XE game system (basically an Atari computer) and use Flash memory as a virtual disk drive. The big thing holding me up is finding the right screen, but it's my dream project.

eMag

Are you Elite?

Elite Systems was 20-years-old last year, and yet very little is known about the Midlands-based publisher and developer after it exited the home computer market at the tail-end of the 80s. Martyn Carroll visited Elite and spoke to Chairman and co-founder Steve Wilcox about the company's long and often undocumented history

The walls of Elite's offices are adorned with glossy images of its games – Bomb Jack, Paperboy, Ikari Warriors and many more; licensed titles that during the mid-80s propelled the company to the forefront of the UK software scene, giving it a tangible share of a market dominated by the likes of Ocean and US Gold. But these images are not just there to remind visitors of the company's hugely successful past. Rather, they showcase Elite's current product line-up, with properties re-acquired, resurrected, and released for mobile devices. So the company that delivered arcade smashes like Paperboy to your home computer back in the 80s is now bringing the game to your mobile phone.

That said, if Elite was to decorate its offices with its most successful games, then these 8-bit licenses may not even earn wall space. Because during the mid-90s, when the company signed up to develop console software for both Nintendo and Sony, it enjoyed two massive successes in the shape of Striker for the SNES and Test Drive: Off-Road for the PlayStation. The latter was Elite's first million-selling title; not even the mighty Paperboy could match that. And yet by that time, the company was solely operating as a developer and therefore almost invisible. You could be forgiven for thinking that it'd gone the same way as Ocean or Domark, swallowed up by one of Europe's publishing giants. But Elite lives on, having survived the ups and downs of the videogame market for over 20 years.

Out of the blue

These days, Elite is based in Burntwood, near Birmingham, and managed by Steve Wilcox. Steve and his father formed Elite back in 1984, but the impetus came from another family member.

"The whole thing was kicked off by my younger brother, Richard," recalls Steve. "Around 1979, my Dad brought a computer home – he'd been attempting to create accounting software to help run the family business. While I was away at college, my brother, who would have been about 12 or 13, started to teach himself how to program this prehistoric computer – I can't remember what model it was. So when the Atari 400 came out, he got one, and over the period of a

The original Blue Thunder advert featured a small coupon which readers could use to mail order the game

year or two, he wrote a very rudimentary game.

"This coincided with me leaving college and opening a computer game shop," continues Steve. "The shop was based in Walsall, in a back street, and was named Bowies, after my favourite music artist. The name had nothing to do with computers or games and confused everybody! Anyway, I was selling the very early games that were around – the Psion games, the Horace stuff – and was in touch with many of the smaller, self-publishing developers – Richard Shepherd Software, the Ultimate guys. I was buying their games and selling them, and suddenly we had a blinding flash in the office one day. My dad said to me and my brother, based on what he could see was happening in the retail outlet, that we needed to actually produce games for the more popular systems. So my brother wrote a version of his Atari game for the Spectrum. It was called Blue Thunder, and my old man put up a couple of quid to get the game advertised in C&VG, and I duly arranged the production and sale of it."

Blue Thunder was a simple shoot-em-up based on the film (and short-lived TV series) of the same name. Like almost every game of the era, it was merely 'inspired' by an original property. This less-than-tenuous link certainly did the game no harm however. "The business at this stage was still very much developer, publisher and retailer, so we actually took Blue Thunder down to WHSmiths' head office. We walked in, showed them this copy of our little plastic cassette, and they said 'we'll have 5,000 of them thank you very much.' This was a very pleasant surprise, and we walked away with an order for around £12,000."

And it all started from there. Blue Thunder was released in 1983 under Richard Wilcox Software, but Richard, who was 15 by now, wasn't in the position to dedicate himself to programming full-time, so Steve set about finding other local lads who might be able to do something similar. "We hired four lads, all aged between 16 and 18, and they went on to write the first official Elite game which was Kokotoni Wilf. And this was followed fairly quickly by several other games."

License to kill

The success of Blue Thunder proved that games based on licensed properties, official or otherwise, was the way forward. "The whole UK computer game business at that stage was driven by product that was 'inspired' by games that were doing well in the arcade. We could clearly see that there was a connection between arcade games, television programmes and the success or otherwise of the home computer variant."

Rather than run the risk of releasing an unofficial game, Elite made a connection with MCA, who owned the rights to the popular Airwolf TV series. "We didn't deal with MCA directly. Instead, we went through a UK agent who acted for these people. We put a proposition to them for the Airwolf license and it was accepted." However, some readers will remember that adverts appeared for an Airwolf game by Ocean. It transpires that Ocean did indeed step in and offer more money for the license, and the deal Elite had shaken hands began to unravel. "We actually got in touch directly with the people at MCA and appealed to their sensibilities, explaining that we'd had the offer accepted by the UK agent. And to their

›Burnin' rubber

One of the stranger Elite licenses was 911TS which featured Dunlop Tyres branding. "That was a very odd one," reveals Steve. "Dunlop operated from a large building on the outskirts of Birmingham, and we were approached by one of its local marketing managers. He had this brilliant promotional idea where anyone who bought four Dunlop tyres was given a game."

Sounds like a plan – except that there was no game to speak of. "Dunlop quickly wanted a game tailored to its brand in some way, and we were working on a horse racing game called Grand National, so we re-engineered this game and replaced the horses with cars! It was eventually released commercially as 911TS, and I've absolutely no idea what the TS stood for."

Elite's first game, Kokotoni Wilf, was written in a storeroom at the back of Steve's computer game shop

credit, they instructed the UK agent to proceed with the original deal. And the rest is history."

Elite 1, Ocean 0, you could say (and Ocean would soon look at ways of drawing the scores level). But for now, Elite had one of the year's best-selling games on its hands. Airwolf was released on a wide range of 8-bit systems and despite a critical mauling, sales topped 100,000. Amazingly, Elite offered just £3,000 for the Airwolf license and it was accepted. This really was in the days before people realised how much these licenses were truly worth, and it was a situation that wouldn't last for long.

While it did last, Elite signed deals with various television studios to release games based on The Fall Guy ("what a great game..." laughs Steve), The Dukes of Hazzard and Scooby Doo (the Scooby game was originally intended to be a cartoon adventure, but this was later scrapped in favour of a standard platform affair).

A deal with heavyweight boxing champion Frank Bruno was also done. "I went down to Frank Warren's gym in East London, told them about our idea, and they looked at me like I was from Mars. None of them knew what a computer was! I was introduced to Frank and I explained what we were going to do, and what his involvement would be. We did the deal, went back a few months later with the game, and they liked what they saw. At least I think they liked what they saw!"

Frank Bruno's Boxing was released in 1985, as Frank was reaching his professional peak, and this solid, Punch-Out!!-inspired arcade game matched Airwolf in terms of sales. However, the year would see one more Elite release that would eclipse the total sales of both Frank Bruno's Boxing and Airwolf put together.

Going Commando

Elite had developed a relationship with UK-based arcade operator Electrocoin, and through this association was introduced to Capcom. "In those days, Kenzo Tsujimoto, the now billionaire who's still in charge of the Capcom empire, was a fairly regular visitor to Europe and did a lot of business with Electrocoin. While he was over in the UK, we and a few other people who had shown an interest in licensing the Commando arcade game were invited to meet Tsujimoto at a London hotel and make a pitch for the license."

One of the other people pitching for the license was Jon Woods of Ocean. He was obviously still a bit rankled after the Airwolf affair. "I remember Jon telling us how completely pointless it was for us to pitch for Commando, especially as Ocean was a more established name than we were. A bit of banter followed, and eventually my father and I were invited to meet Tsujimoto in his hotel room – I say a room but it was a very large, expensive suite. Having had a couple of successes with Airwolf and Frank Bruno's Boxing, we had an understanding of what sort of volumes could be achieved from a successful license, so my father tabled an offer of £25,000. Now remembering the banter I'd had earlier with Jon Woods, and confident that we'd be looking at comfortable six-figure sales with Commando, I said let's make the offer based on 100,000 units with a royalty rate of 65p a unit. So the offer instantly upped from £25,000 to £65,000! My old man, to his credit, didn't even flinch. And then nothing happened. There was no handshake, we just exchanged pleasantries and were sent off. We went down to the hotel lobby and I wasn't quite sure what had just happened.

Commando was a great game on all 8-bit systems, with the C64 version coming out on top thanks to Rob Hubbard's brilliant music

Ocean had an Airwolf game in development and went as far as advertising the game in the computer press (above)

Elite's Airwolf was one of the most difficult games ever. This regenerating wall still gives us nightmares!

Elite programmers posing for a photograph back in 1985

Had we got the deal or what? After a couple of nervous hours we were escorted to a lawyer's office – proper lawyers, £1,000-a-minute guys – and the deal was done that very day."

Having tabled an offer of just £3,000 for Airwolf a year earlier, Elite was now stumping up comparatively huge sums. Steve's sales predictions were sound though, and Commando was the best-selling game of Christmas 1985, shifting 200,000 copies in total and knocking Ocean's own Commando clone, Rambo, into second place. The Commando deal also opened the door to Capcom, and further coin-op conversions followed including 1942 and Ghosts 'n Goblins.

Amazing Paperboy delivers!

The Commando deal was completed in August 1985, but rather than wait and see how the game performed, Steve visited the Tokyo Games Show in September to see what other arcade games were coming to market. It proved to be a very profitable trip.

"The show was quite a modest event back then, although Sega, Capcom, Tecmo and SNK were all there. I expected to see representatives from all the UK publishers, but it was just me! Even Jon Woods wasn't there. I phoned up my old man and told him that there were about 10 games that would work for Elite. He told me to sign them all up and I did. I basically had a piece of paper which said who we were, that we'd just done a

Paperboy was a huge hit, with the game even appearing as a playable event in the BBC quiz show First Class

>He who dares...

Imagine the situation. You've just done a significant deal with Capcom to bring Commando to home computers and then you clap eyes on Alligator Software's Who Dares Wins. It looks the same as Commando, it plays the same – even the layout of levels is similar. Best of all, this uncanny clone was on sale before Commando!

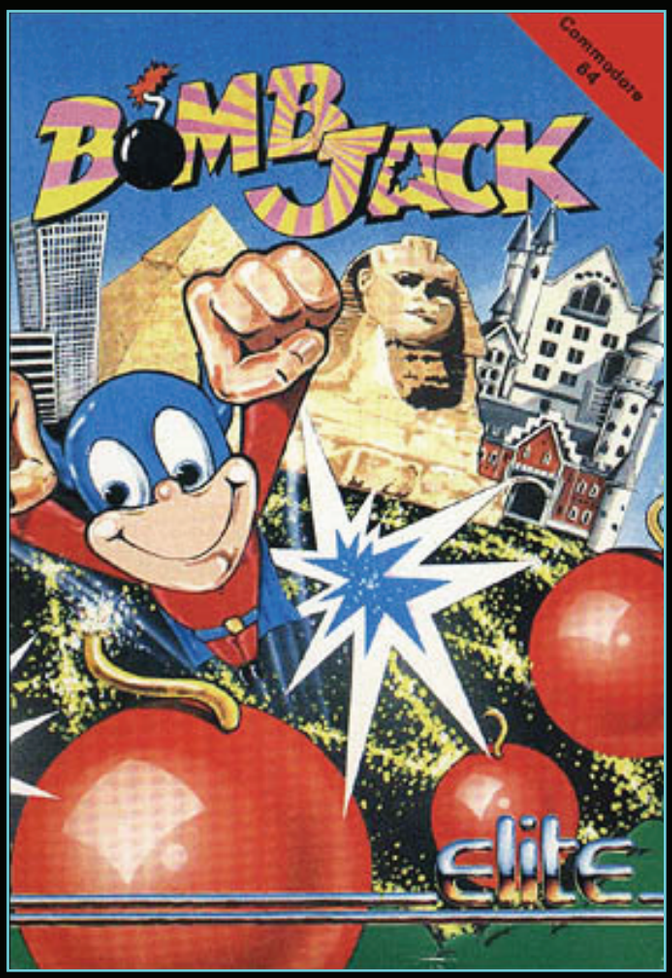
"We felt that if Who Dares Wins came out before we got Commando to market it would certainly take some of the shine off our product," says Steve, smiling about the situation now. "We contacted Alligator and made it aware that we held the rights to the Commando license, and the people there basically told us to get lost! We sought a bit of legal advice on what our options were and we were advised to go to the High Court and obtain an injunction to prevent sales of the game. The court found in our favour and granted us something called an Anton Piller Order. We then had to contact the local sheriff – which was a completely bizarre thing to be doing in the 1980s – and tell him that we'd been granted one of these archaic orders which required him to assemble a posse! And over the course of one weekend, the local sheriff and a group of his merry men, armed with this Anton Piller Order, went over to Alligator's offices in Sheffield and literally sealed them off! The Alligator guys turned up for work on Monday morning and found that their entire warehouse full of this Who Dares Wins game had been sequestered.

"But being the canny lot that they were, Alligator took a bit of advice itself and discovered that if it changed the product, then the specific order we'd got would no longer apply. So in fairly short order it popped up with a game called Who Dares Wins II, which as far as I recall didn't differ a whole lot from Who Dares Wins except that the commando in the game had a blue beret as opposed to a green one. But it bought us a few weeks and Commando successfully made it to market before Who Dares Wins II."

That's Commando above and Who Dares Wins below. A fairly open and shut case really!

deal with Capcom for Commando, and we were looking to sign similar licenses. I came back to the UK with the rights to Paperboy, Space Harrier, Bomb Jack and others. Unsurprisingly, I returned to the show the following year and it was absolutely swarming with UK publishing people."

That trip alone ensured that 1986 was Elite's most successful year to date. The home computer versions of Paperboy alone shifted in excess of 400,000 copies, and over time that figure doubled thanks to budget re-releases. "In our first financial year, with titles like Airwolf, Kokotini Wolf, The Fall Guy and The Dukes of Hazzard, we turned over around £600,000. The following year, which of course included Commando, it rose to £1.5 million. In 1986 we went over £3 million for the first time. It was pretty rapid growth and we were very fortunate. But nonetheless, the overheads built up pretty quickly too, and although we kept the internal development team much smaller than most other publishers, we did eventually employ 30 people."



One of Elite most popular games, Bomb Jack has since been re-released for mobile phones

To top things off, Elite's was awarded 'Software House of the Year' by Computer & Video Games magazine. All of its games had sold well, but now it was finally receiving critical praise from the specialist press.

Downward spiral

Having successfully combined games software with intellectual properties – and going some way to establishing the license-driven videogame market we endure today – Elite ultimately became a victim of its own success. The value of licenses was explicitly clear to everyone, especially rival software houses.

"We moved from a period where we were one of the very few publishers willing to stump up fairly significant sums for the right license, to a situation where most of the people in the publishing business were prepared to pay the asking price for the right properties."

To make matters worse, the rising levels of business attracted agents. "A number of intermediaries got involved in this whole process of hawking licenses around, and people we'd had a direct relationship with were no longer wanting to deal with us directly. These agents would show us the latest arcade license or movie license, and they'd obviously ramp the price up. We also realised that we were beginning to be offered what I'd describe as sub-prime properties. For example, one of Atari's agents offered us 720 – a good game but certainly not a great game – and wanted £50,000 upfront. We didn't think that made much sense and walked."

Elite walked alright, walked away from licensed games almost completely, and set off on the path to original product instead. "We came to the conclusion that it we put the same time and financial resources into creating original games, even if only one in three or one in five was a success, that was no more expensive and arguably a lower risk than whacking £50,000 or £100,000 on the table before you even started developing the game. We stopped taking on licenses and spent a couple of years building up a fairly substantial in-house team, and tried to replicate the same success creating games as we'd had in converting games from the arcade. And as our rapid disappearance from the radar shows, we weren't exactly very good at that!"

Original sin

Between 1987 and 1989, Elite released a number of original titles including Overlander, Beyond the Ice Palace, Wanderer and Hopping Mad. There were no particularly poor games, but sales were somewhat less than stellar. By the end of the 90s, Elite was perhaps better known for releasing compilation packs and budget games (the Encore and Hitpak labels sold back older games for as little as £1.99).

New titles were few and far between, and it appeared as though Elite was simply wringing the last few drops of cash out of its impressive back catalogue. But Steve had something on the back burner and Elite was about to change direction yet again.

That first trip to Tokyo had opened his eyes to Nintendo's Famicom, which on a domestic level was doing crazy levels of business. "It was clear that the console boom would ultimately happen over here, so I came back from one of my trips to Japan with a handful of Famicoms and got one of our more technically adept subcontractors to reverse-engineer the machine and essentially write us a programmer's manual. At that time there was no indication that Nintendo would contemplate having European developers involved, but we gave one or two people the job of writing games for the NES. We had a few abortive attempts, but eventually we were in a position to show Nintendo what we had been working on. And over a period of a couple of years, Nintendo gained an understanding of our enthusiasm for its platform."

In 1990, Elite turned up at the CES (Consumer Electronics Show)

With Dragon's Lair, Elite brought the adventures of Dirk the Daring to the NES

with a demo of Dragon's Lair, based on Don Bluth's laserdisc arcade game. The game was offered to Nintendo and the nod was given right there and then. With that, Elite became one of the first official European third-party publishers of Nintendo NES games.

"That got us going again after a couple of moribund years trying to create original games. So in the early-90s, although it was much less visible, we actually had a resurgence on a commercial level. In terms of turnover we were a much bigger outfit in first half of the 90s than we ever were in the 80s."

The power of PlayStation

Other successes followed, the most noticeable being Striker, which was developed in conjunction with Rage Software. The title was the best-selling third-party Super Nintendo game of 1994, selling over 200,000 copies. Elite was back on track, but as the 16-bit consoles reached the end of their natural life, something happened which pretty much decimated the UK software industry.

Steve takes up the story: "Around 92/93, Nintendo had this remarkable arrangement in place where it appointed a number of local distributors around Europe, and we almost acted as an intermediary. We'd develop the game, purchase the inventory from Nintendo of Japan, then ship it over to Europe and sell it to the Nintendo distributors in each of these local markets. But as the 16-bit console market matured, we and a few other publishers realised that we needed to build our own direct-to-retail relationships, so we opened a few of our own offices around Europe which allowed us to sell directly to the local retailers. In theory this gave us a bigger profit margin, but in practice this placed all the risk on our own heads as we were no longer being provisioned with purchase orders from Nintendo's local distributors.

"About this time, Sony got involved in the business, and it came to us, Ocean, Domark, US Gold and one or two others, and said that instead of using our own regional offices, we should take advantage of the Sony distribution network which was already built-up with 25 regional offices around Europe. Sony would buy the product from us and supply it to the local marketplaces. This offer was

›Sloppy seconds

Following early success with licenses like Commando and Bomb Jack, Elite quickly released home-grown sequels to the originals. Unfortunately, they were pretty poor efforts all-round. Commando '86 (aka Duet) was like a weird cross between Commando and Gauntlet, while the best bit about Bomb Jack II was that the original game was given away as a freebie! Much better was Mighty Bombjack, but then that was based on an original Tecmo arcade.

Striker was a huge hit on the SNES and spawned a long-running series of games

taken up by quite a few publishers, including ourselves, and we all did very well out of the deal. But at the tail-end of 1994, just as we were about to ship our Christmas products, Sony dropped an absolute bombshell. Realising that the market was maturing, and as a result oversupplied, Sony suddenly slashed the price it would pay for new products."

As a direct result of this action, Elite lost £2 million – a massive sum, but still far less than others. Records show that Domark lost £3 million plus, Ocean lost in excess of £10 million, while US Gold lost a colossal £18 million. In time, US Gold and Domark were absorbed into Eidos, Ocean ponied up with Infogrames, and Elite became a dedicated developer.

"All of our working capital had been wiped out in a blink of an eye and we were no longer able to develop and publish our own product. We didn't know it at the time, but what happened that Christmas was clearly a precursor to the launch of the PlayStation.

Developed by Elite and published by Accolade, Test Drive: Off Road quickly clocked up sales in excess of 1 million

Elite in 2005. From left to right: Richard Benton, Matt Hyden and Steve Wilcox

Sony had done a remarkably good job of wiping out a number of the major players in European games publishing."

Nonetheless, Elite signed a deal with Sony to develop PlayStation games. "We created a couple of games for the PlayStation, but we struggled to put the required resources into these products and it showed. They were not the best games by any means. And it was taking a year to 18 months to get these products through the system. With a limited number of publishers in the PlayStation market to take your product to, we felt it more prudent to develop PC games. We came up with a sequence of driving games, and our first, Test Drive: Off-Road, was our first official million seller."

More driving games followed, including Gran Touring, Ford Racing and Honda Off-Road Racing, but even PC games were requiring larger and larger development teams. "Each game required a 20-man team and you needed to sink in half a million before you could even pitch it to a publisher. We went from a stage where we always had six or seven games in the pipeline at any one time, to having just one. And it was an unsustainable business. We eventually called a halt to that activity four years ago."

Mobile operations

Once again, Steve was forced to steer Elite in a new direction, and in doing so the company has come full circle. "We started to look at other devices for which we could develop games at the kind of costs we had been producing games for 15 years earlier. We had some experience of the handheld business, having produced a number of GameBoy games, so started looking at things like the Palm devices. And as we were looking in that area we discovered that mobile phones were slowly becoming viable gaming platforms."

Over the past three years, Elite has gradually re-acquired the rights to old games like Bomb Jack, Buggy Boy, Ikari Warriors and Paperboy, and re-released them for mobile handsets. But it's not a case of playing it safe with familiar licenses, as Steve has also snapped up the rights to some new products such as a game based on the recent Alien vs Predator movie.

The growing mobile games industry is almost exclusive in that there are a number of ways to market and you don't have to pitch ideas to a potential publisher. It's becoming a crowded market though, and some of the larger publishers have started to muscle in, but having carved out a successful 20 year career in games, Steve is surely better prepared than most to fight his corner.

I asked Steve if he's familiar with the ELSPA Hall of Fame which honours those who have made a lasting contribution to the UK software industry. Recent recipients include Richard and David Darling, founders of Codemasters, and David Ward and Jon Woods, founders of Ocean. I wondered if he could ever see himself inducted alongside such lofty company. "No," he replies quickly. "It would be nice, but those people – the Darlings, the Ocean guys – are all absolutely exceptional. For me, developing and publishing games is simply a great way to make a living. And it's very rewarding to know that some of the games we did are fondly remembered by fans. It's been financially rewarding sometimes, and it's required a bit of nerve on occasions, but we're still here today, 21 years on, and I don't imagine I'll ever do anything else."

›Elite in 2005

Elite's range of mobile phone games is packed with retro classics including Bomb Jack, Ikari Warriors, Paperboy, Buggy Boy and Chuckie Egg. New games include Alien vs Predator, a one-on-one fighter based on the recent movie, and Star Warriors, the first 3D RTS game designed exclusively for mobile phones. To get hold of any of these games, contact your mobile network operator or visit the Elite Web/WAP shop at www.elite-systems.co.uk.

eMag

STRANGE GAMES

Retro Gamer largely exists to celebrate classic games from the past, but that doesn't mean we should skip those weird and wonderful titles that come kicking and screaming into the gaming world. Per Arne Sandik begins his regular tour of the obscure with a look at the more bizarre relationships between movies and games. Dangerous liasions indeed...

Licensed games are a near-surefire way of turning a quick profit. Whether they are shoddy cash-in platformers (here's looking at you, THQ), faithful recreations of a movie's world, or absurd double whammy licenses like the upcoming Star Wars Lego game from LucasArts, they have the privilege of living off their parents' popularity. But the interesting stories behind how some of them came to be or were undone aren't widely known.

A number of games' individuality was only skin deep back in the eighties and nineties. Well, you could probably say that a modern game like Conker's Bad Fur Day is basically Banjo-Kazooie with new level design and the addition of a fluffy tail at the back (as well as a none-fluffy one at the front in a couple of cases), and there's bound the be other examples. It's no wonder that developers build on an engine they already have.

As featured in Retro Gamer issue 11, Wolfenstein 3D was transformed into Super Noah's Ark, presumably in the presence of a blinding white light

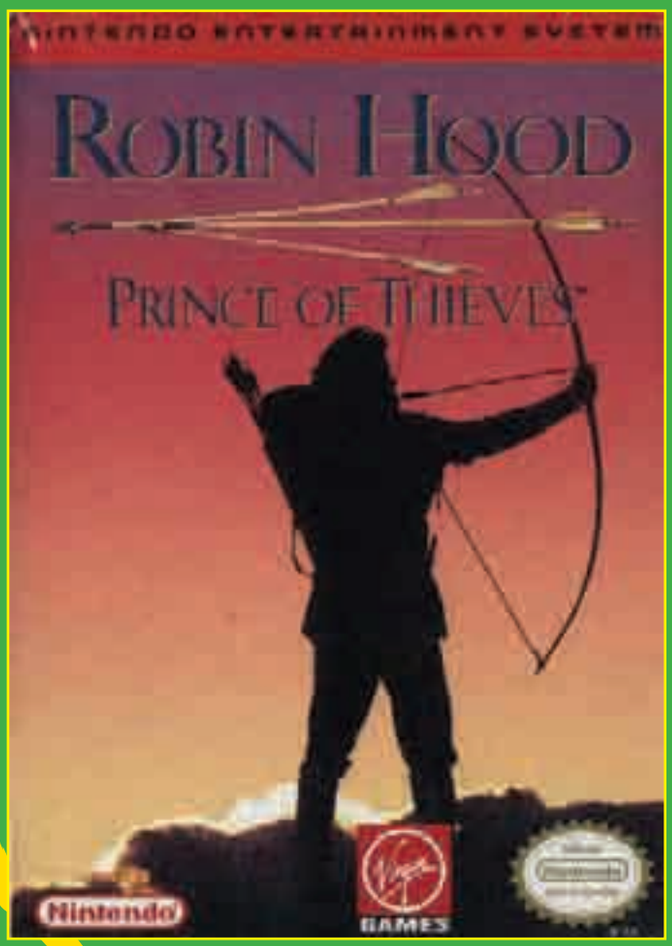
But boy, did it happen a lot in years past. You may know that Super Mario Bros 2 was originally the oriental-themed Doki-Doki Panic, or that puzzler Puyo Puyo has been adapted to tie in with Kirby and Sonic. What you may not know is that Wolfenstein 3D was turned into religious FPS Super Noah's Ark 3D for the SNES, with Josef Goebbels and machine guns replaced with kangaroos and melon shooters.

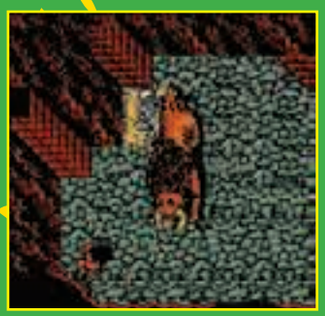
But what about licensed movie games? A license is a rickety bridge, with corporate alliances being tied and broken like cheap shoelaces every day. That you're working on an official movie tie-in today doesn't mean you will be tomorrow.

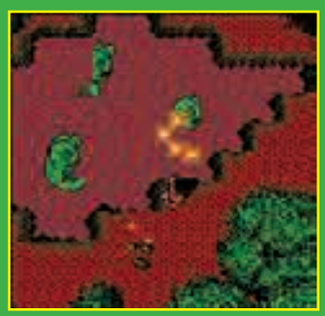
"This has happened many times. I have worked on a few," informs Hal Rushton, former project leader on many Sculptured Software titles. "We were working on a Xena game for the PS2, Xena started plummeting in the ratings, so our publisher opted out of using the license and the game was reworked and became Barbarians instead."

›Vangelis: The Game

Due to a copyright issue, the second batch of Blade Runner tapes for the Commodore 64 and Spectrum laughingly had to be subtitled "A Video Game Interpretation of the Film Score by Vangelis".







No, we can't recall the scenes in Prince of Thieves where Robin battles with wild boars and frog-monsters either

Prince of Thieves

One of the projects Rushton was in charge of was The Legend of Robin Hood, an adventure-RPG game for the NES and GameBoy. "We were very far along with our Robin Hood game when we found out that two Robin Hood movies were in production," he says. "We got the license to Robin Hood: Prince of Thieves and then had to adjust accordingly. The game story had to be entirely re-written and many new things added. It was a bit of a pain."

A prototype of this game surfaced a couple of years ago, in Spain of all places. The gameplay is basically the same, the menu system is cumbersome, as is the perspective. No matter how far away something is, if the perspective places it beside you, it's beside you. This means you're likely to get stuck between a small rock and the top point of a nearby castle. The graphics were greatly improved before the release, though, and Paul Webb's music is excellent.

While the prototype was close to completion, it's far from playable. You have to press a button combination to warp to other areas, and most of the time you'll find yourself in the nullspace outside interior settings. The title screen demos do however give us a glimpse of what hides in there, like bat-men straight out of Ninja Turtles and giant sewer octopi that would make the alleged New York crocodiles wet their reptilian pants. Not all of these were removed. There is still the giant exploding monster boar, the 12-foot skeleton and the frog-like pond creatures that attempt to stop Robin Hood from stealing their precious mystical healing water by flinging magical missiles at him.

It's almost uncanny! In case you're confused, that's Costner on the left and Rickman on the right

A curious aspect of the game is the lack of the actors' likeness. Robin Hood looks more like the love child of Elvis Presley and Fozzie Bear than Dances With Wolves himself, and Alan Rickman looks positively German. "We had the rights to the film, and the look of the film, but we did not have the rights to the actors' likenesses," explains Rushton. "Sometimes an actor's license can be as expensive as a movie license."

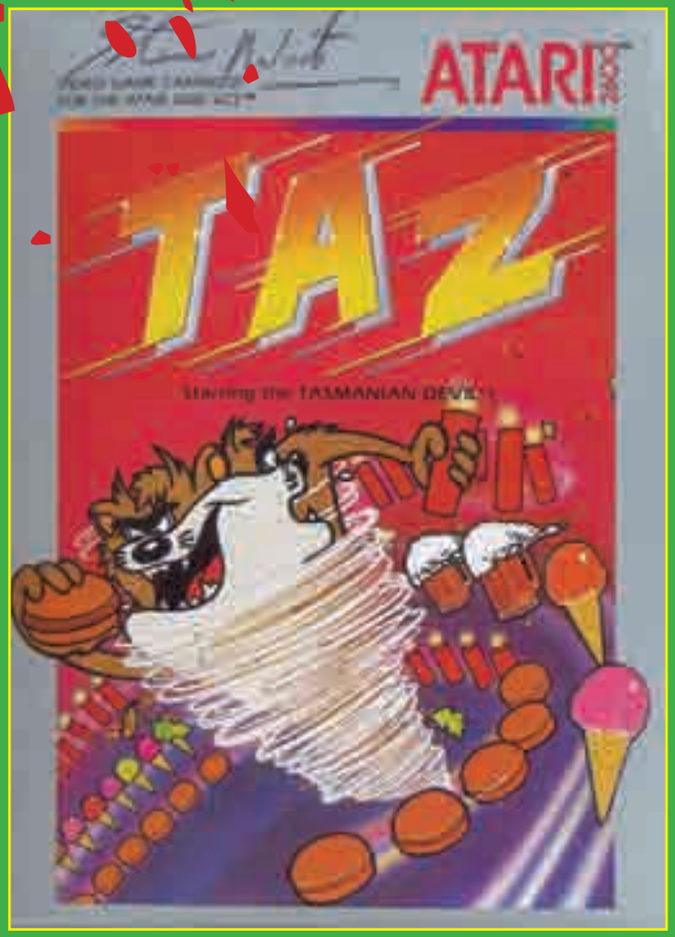
Hell on Earth

Happy accidents like this are few and far between. It's more often the case that licenses are suddenly revoked and developers find themselves being the guardians of unwanted children of corporate divorce. Color Dreams was at one point working on a Hellraiser game, but due to over ambition (to render 16-bit 3D graphics on the NES, the individual carts would have to be equipped with Zilog Z-80 processors that would rocket the store price to well over $100) and lack of focus, the license went nowhere.

There are many other examples: Robocop versus Terminator, California Raisins, Thomas the Tank Engine and Police Academy (based on the animated series rather than the series of movies that challenged Death and won) being among them. "I only needed about three more months to finish the project," says Steve Woita, designer, programmer and producer of Police Academy. "This was the first version of Police Academy for the NES that Tengen did. When we play tested the game it was one of Tengen's highest scoring games. To my surprise, a few days after the play test, management decided to get a whole new team on the project. Another team got assigned to the project and they play tested theirs and it tanked."

However, this was not the first

Before turning to God, Color Dreams failed in its attempt the bring the Hellrasier movie to the NES



time Woita experienced a licensed property being yanked out of his hands. Successfully introducing the static feline Garfield to the world of games, or movies for that matter, is a feat still unaccomplished, and we'll never know if his discontinued 2600 project would have proved fruitful. "The Tramiels were too cheap to pay the license fee to the Jim Davis people and they just wanted to focus on the Atari ST," remembers Woita. "I chose to do this license because I really liked and still like Garfield. It was a blast working with Jim Davis. He came to visit me in my work cube and wanted to play this other game I did on the Atari 2600 called 'Taz'."

Woita is of course talking about Tasmanian Devil. "The full name was way to long to fit on our 2600 title screens and I shorted the name to 'Tazz'. A license guy from Warner Bros. said 'I like the smaller name, but let's drop one of the 'Z's,' and so the name 'Taz' has stuck ever since."

Of course, things aren't always this tumultuous in the world of licensing. Whether humanity really needed platformers based on mediocre Tim Allen sitcoms is up for discussion, but obviously tie-ins are usually produced without too much gnashing of teeth. Like Woita says, "For the most part it's been very easy and they usually just let me or the group I'm working with do the game the way we think it should be done. I've been very, very lucky when it comes to working with people who hold the rights."

So there you have it, a small taste of what could have been and almost wasn't. The next time you find yourself thinking the game you're playing is stealing everything from your favourite movie, you never know. Maybe you would be playing the real deal had things turned out a little differently.

Taz for the 2600. A bizarre little game based Warner Brothers' Tasmanian Devil

›Death is not the end

Sunsoft found itself in a sticky situation in 1990, when it suddenly lost its deal with Orion and no longer would be able to release its Terminator game. Chances are you still have played the game, though, as a few story and graphics tweaks were enough to turn the title into Journey to Silius, a sadistically difficult but underrated game. Skilled players and emulator cheaters can still find elements that bear witness of the earlier incarnation, such as an end boss eerily reminiscent of a certain US governor's robotic skeleton.

It has also been speculated whether another Sunsoft title, the never-released Sunman, was originally supposed to be a Superman game. All the elements are there: timid reporter turning into a flying Superhero with laser vision, and a game engine originally used for Batman, another DC comics license. No matter what the truth is, this would have made for a far better Superman game than the travesty released by Kemco. Superman just isn't that super when he has to take the subway to where crime is.

Top, the very Terminator-like final boss in Journey to Silius. Sunman, meanwhile, was surely designed as a Superman license

eMag

Retro Scene

Retro Gamer reports on the glorious, ever-growing retro scene, bringing you community news and retro reviews...

New Games From Cronosoft

Cronosoft is on the verge of releasing two amazing new games for 8-bit machines. First up will be Astro Nell for the VIC-20 and this will be followed by Higgeldy Piggeldy for the Spectrum

Astro Nell is a colourful platformer in which you have to guide Nell around a hostile planet, collecting fuel cells required to power up your spaceship and escape. Astro Nell is very much like Manic Miner, which is an achievement in itself as Software Projects never managed to get Miner running on the VIC-20. Even more amazing is that it runs on an unexpanded VIC! Higgeldy Piggeldy, meanwhile, mixes puzzle and platform elements with the main task being to transport a herd of intergalactic flying pigs to the meat processing plant for maximum profit! Sounds intriguing...

Both of these games will be reviewed in next month's Retro Gamer. In the meantime, visit **www.cronosoft.com** for the latest news.

Commodore Scene Meet

Allan Bairstow (who produces Commodore Scene fanzine) will be hosting an all-Commodore workshop on March 19-20, held at Garford, just outside Leeds. During the weekend, Allan is planning a Bombmania competition and general gaming fun, as well as some more serious activities including GEOS and hardware workshops and Q&A sessions. All machines will be represented, from the CBM/PET series through to the Commodore 128 and Plus/4. We've even heard rumours that there will be a new game launched there. If you would like to attend, or obtain further information, email **CommodoreScene@btopenworld.com** or head over to **www.commodorescene.org.uk**.

Wizards At War

Protovision has announced further details concerning the development of its upcoming C64 game Wizard of Wor Tournament. When finished, it will utilise Protovision's own four-player adapter and will be the first C64 game to allow two computers to be linked together so that two teams of four players can battle it out against one another.

Protovision's Wizard of Wor will bring eight-player tournament battles to the C64

Wizard of Wor Tournament looks like it's going to be a firm favourite with hardcore Commodore fans, and one that will ideally suit scene parties and meetings. For more news on this and other developments from Protovision, head over to its homepage at **www.protovision-online.de**, and for those of you who can speak German, its previews page is at **www.protovision-previews.de**. The latter site will soon be translated into English, so it might be worth book-marking anyway.

Cheap Clone

Rumours have reached Retro Gamer about a SuperCPU clone for the C64 and 128. This new device will essentially be compatible with the SuperCPU but will run slightly slower (18Mhz instead of 20Mhz). It will come complete with 1Mb of RAM as standard, which could be potentially upgraded to 16Mb, and work in conjunction with the IDE64 as well as having native networking capabilities to link your C64 to a PC or Ethernet connection.

The biggest benefit of this development will be that the unit cost is planned to be lower than the SuperCPU. We're certain that,

Coming soon from Cronosoft, Higgeldy Piggeldy (top) and Astro Nell (bottom)

More 2600 homebrew is on the way thanks to the guys at AtariAge

if this device proves popular enough, it'll see a port of Metal Dust as well. We're keeping a keen eye on this development, and as soon as we know any more, you will also.

More Homebrew

AtariAge has announced the port of the relatively obscure Taito arcade game Crazy Balloon for the Atari 2600. In this homebrew production, you must navigate a balloon around a maze, racking up points and avoiding anything that may burst the balloon. The game will soon be available to buy, and there will be a legally downloadable ROM image available (from **www.atariage.com**) for your emulator. If you are partial to a little homebrew, you can't go far wrong here.

Screenplay 2005

Finally – and we *really* hope you get to read this before the event takes place – the 5th annual Screenplay Festival, celebrating videogame culture, takes place at Nottingham's Broadway Cinema (and surrounding city centre bars) between February 25-27. This year, the mix of gaming, discussion, music and art includes everything from Machinima screenings, a presentation from digital artist Tom Betts, live game-inspired electronica and a big screen games tournament.

There is also plenty of retro content. The cinema foyer will house numerous arcade cabinets, including a Star Wars sit-down cabinet. A shoot-em-up exhibition will feature old school classics like 1942 and R-Type alongside Rez and Ikaruga. Pavement Pong will be projected outside the building, allowing players to control the bats with their feet. And a display of Street Fighter II characters lovingly reproduced in cross-stitch will adorn the bar walls.

Guest of honour is Matthew Smith, who will be 'in conversation' with Retro Gamer's own Paul Drury, which will be broadcast live on the Web. For more information, see **www.screenplay.org.uk** and for location and ticket details see **www.broadway.org.uk**.

Manic Miner author Matthew Smith will be making a guest appearance at this year's Screenplay Festival

Homebrew Review: Bomb Jack

Developer: www.kurarizeku.net **Price:** £15.00 **Format:** MSX2 **Players:** One

Aside from a slight difficulty tweak this adaptation of Tecmo's Bomb Jack is faultlessly identical to the 1984 original. The act of deftly flying around the screen to collect bombs whilst avoiding a massive 24 enemies and safely dropping back to earth is just as challenging and addictive as it was 20 years ago. Whilst the secret and not so secret methods of achieving a top score remain the hook that will keep you returning to the game for one more go.

The physics that control Jack's rise and fall have been replicated accurately and the precise controls (needed to carefully guide him through waves of enemeis) work just as smoothly on the keyboard as they do on the stick. Smoother still is the animation: Jack is so detailed that you can see his eyes move as he leaps about and he even performs a little victory dance at the end of each level. Just as much care has been poured into the vivid background images and although the sound quality does not quite compare to the graphics it is varied enough to have a different tune for every stage.

Also worth a quick mention is the wonderful packaging that encases the Bomb Jack disk. Unlike most new retro games this comes in a professional looking case that is part homage and part spoof of the eye-catching boxes that many Japanese MSX games were originally available in. It won't make the gameplay any better but it won't look underdressed next to your official MSX games either.

When people ask why you're still playing those simple games from the eighties it's gems like this that are the answer. Bomb Jack is a flawless tribute to the original that's well worth digging out the MSX for.

Rating:

http://Retro

We interview Lemon64 creator Kim Ltmon, and take a look as some of the best Commodore 64 resources on the Web

Lemon64 is considered by many to be the best Commodore 64 website on the Internet, and for good reason – it's absolutely stuffed! The site features information about every C64 game you'd care to mention, including detailed story information, screenshots, boxshots, SID music, interviews, old adverts and plenty of downloadable content. Most importantly, it's a site dedicated to the huge C64 community, and everyone can have their say on retro games, and many fans review their favourite (or least favourite) titles on the site for all to see.

We were lucky enough to interview the site's creator Kim Lemon who, despite recently launching the new Lemon Amiga site, found time to talk to us about the creation of this essential C64 resource.

Retro Gamer: Lemon64 was founded in 1998. What encouraged you to set up your own Commodore 64 site?

Kim Lemon: A lot of nostalgia, my recent discovery of emulators and a passion for developing websites.

RG: C64 content originally formed a small part of your personal site. At what point did you realise a dedicated website was required?

KL: I received a lot of cheerful emails from users regarding the C64 section on my personal site, and feedback has always been a major drive for me. There were very few good C64 sites in 1998, and none of them really attracted me, so the only solution was to start building one myself.

RG: Long-time visitors will remember that the site used to offer downloads for the vast majority of commercial C64 games, where as now this is restricted to games where the publisher has given permission. What brought about this change?

KL: I got an email from a publisher who wanted me to remove its games. This was sort of an eye-opener, and I made the decision to remove all game downloads. After this I started to focus more on interactivity such as reviews, comments and user ratings... and I believe that was a great step forward for the site.

RG: Lemon64 is obviously a huge undertaking. How much time do you spend maintaining the site, and do you receive help from others?

KL: Since Lemon64 is a hobby site I only work on it when I really enjoy it, so it all depends,

Lemon64 is both a indispensable games database and a hub for the C64 community

but at least half an hour per day for basic maintenance. In rare cases up to 12 hours. I also receive a huge amount of help from visitors. It can be anything from writing reviews to scanning game covers or helping out with game credits. Without all these kind contributions Lemon64 probably wouldn't exist today.

RG: Can Retro Gamer readers help in any way?

KL: An excellent way to help is to visit the site, sit back and enjoy. I would recommend joining our C64 forums as well for some good old nostalgia chat. We have really nice people around, and it's definitely one of the most friendly and helpful communities on the Internet.

RG: How many unique visitors does the site attract each day?

KL: 1,600 unique visitors and 100,000 page views per day.

RG: The site is free from banners and pop-ups, so how do you manage to pay the bills?

KL: The hosting bills are paid with donations from warm-hearted members. When there's money left after paying the hosting costs I use it to buy C64 software and hardware for expanding the site. I actually have Google advertising as well, but the banners blend well into the rest of the site, so visitors often get the impression that it's ad-free.

RG: Are you planning any updates/improvements to Lemon64, or are you happy with the current design of the site?

KL: I have lots of plans and my to-do list is enormous. I believe

that the current design is clear and works well, but things can always be better, and there might be a redesign this year. At the moment I'm mostly focusing on my newly launched Amiga site, but I hope to find more time to spend on Lemon64 in the near future.

RG: Tell us a bit about Lemon Amiga. What were your reasons for developing this sister site, and do you have any plans to cover other Commodore machines?

KL: For me, the Amiga brings back a lot of great memories. There was no Amiga site that combined an in-depth games database with the kind of interactivity Lemon64 has, so I wanted to fill this gap with something original. I have no plans to create Lemon sites for other platforms at the moment, but the idea is very interesting. Lemon Genesis or Lemon GBA would be pretty cool.

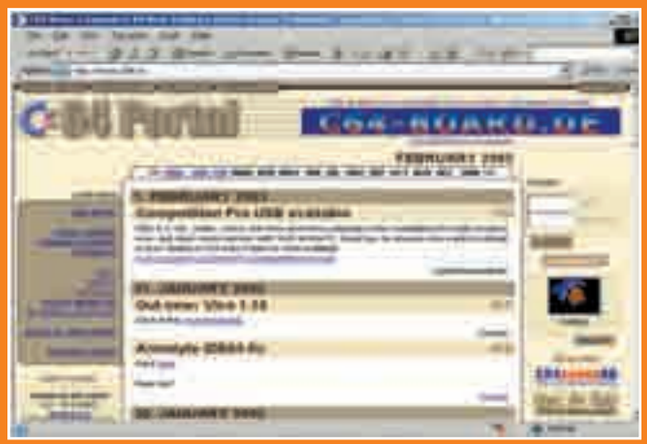
Lemon64 is located at www.lemon64.com, while Kim's new Amiga site can be found at www.lemonamiga.com.

Recommended C64 sites

C64 Portal

www.c64.sk

This is a great site to visit if you're after C64 downloads and news on the Commodore community. The site is updated on a regular basis, and there's always a fresh batch of downloads to sink your teeth into. But by far the best feature of the site is the daily news updates. If you're after the latest happenings in the C64 world, then look no further.



C64.com

www.c64.com

There's almost no title on the C64 that cannot be found and downloaded from this site. Copyrights are no doubt being breached left, right and centre, but it remains a useful resource nonetheless (and you obviously already own the games you download, right?) The site has a searchable database of games, and while it's not the most friendly search engine ever devised, finding your favourite classics shouldn't be too hard.

Games That Weren't 64

www.ozkan.co.uk/gtw

Frank Gasking's fantastic site has been mentioned in the pages of Retro Gamer on several occasions, but we'll happily plug it again! If you're looking for information on C64 games that were never completed and commercially released then this is the place to look. It really is a site to get lost in, and some of the stories of why certain games weren't released are absolutely fascinating. There will be a feature on this very site in next month's magazine.

Mayhem 64

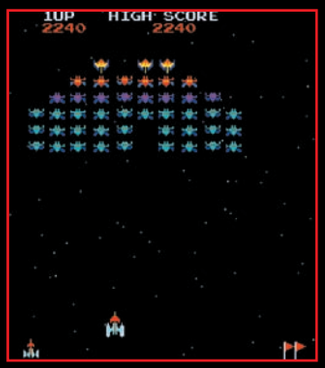
www.mayhem64.co.uk

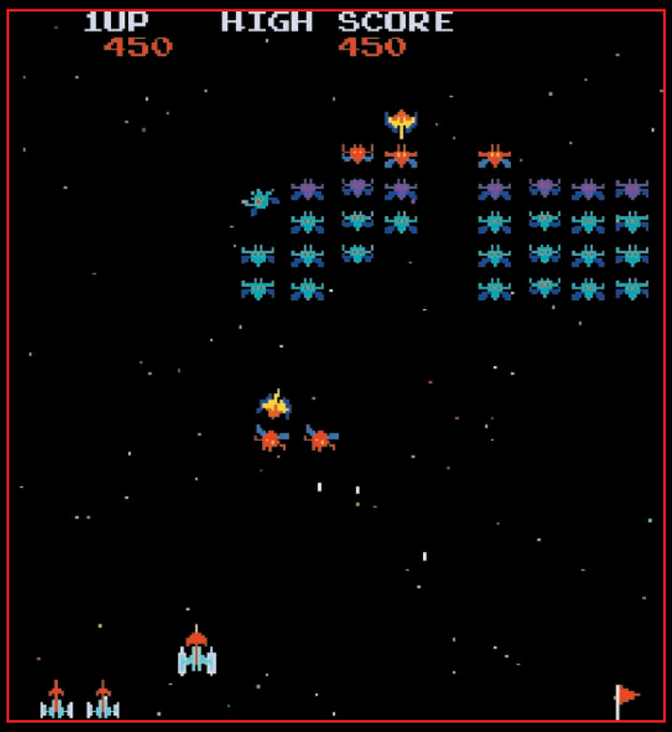
Retro collector and Retro Gamer contributor Mat Allen's site is another Commodore 64 resource that's definitely worth visiting, if only to see pictures of Mat's amazing C64 cartridge collection (he has over 400 of the things, and there's cartridge and packaging scans for each one!) The site also includes a 'haves' and 'wants' list, so fellow C64 collectors can trade with Mat.

1UP HIGH SCORE

THE STORIES BEHIND THE SCORES

We know that this, the first in a series investigating World Record scores on classic games, will not be typical. Firstly, the record is held by a plucky Brit, rather than an American, but more unusually, the monumental score was set only last year. The previous best Galaxian score of 389,770 had stood for over 20 years, but Mancunian Gary Whelan knew it could be beaten.





Gary Whelen and Galaxian go back a long way together – 25 years to be precise

"I had unfinished business with Galaxian," says Gary. "We all used to play it in a pub in Staylbridge called The Freemasons in 1979. Initially, we were all a bit sick about it, because they'd taken out our beloved Space Invaders machine to put it in. But when I played it, I just fell in love. The full colour, the way the aliens moved, the sounds... I was gutted when they took it out and put in Asteroids. You just started getting good at a game, the pub landlord notices the takings are down and in comes a new one. That's business."

Even back then as a 19-year-old, Gary's scores were reaching an impressive 80-90,000. His love affair with Galaxian continued, with fleeting rendezvous' in Blackpool, where the machine could still be found in seaside arcades until the mid-eighties. A long hiatus followed, lasting until 1997, when it appeared on Volume 3 of the Namco Museum series on the PlayStation, and the relationship was deepened when Gary acquired a PCB JAMMA board of the game in the late nineties, playable through a SuperGun. The couple were finally married in 2003, when using the money from a dodgy endowment payoff, he bought his own tabletop machine through eBay for £450.

"It was in pretty good nick – a bit of rust on the legs and the controls needed fixing, but soon I was getting scores over 100,000. I discovered the Twin Galaxies website [NB. The official recorders and verifiers of videogame high scores] and decided to go for the record." Between December 2003 and August 2004, Gary would put in a minimum of two hours play per night, with more at weekends, and meticulously recorded all scores over 100,000, noting any particular strategy used.

"I tried a million and one things. The game looks like it all flies at you, but if you play it a lot, you can see a big pattern there. If you shoot the same aliens at exactly the same point, you can tell what's going to happen next. That's pretty much impossible to do, as one bullet wrong and everything changes, but in certain situations, you can predict what's coming."

For a while, he experimented with the method used by the previous record holder, Perry Rodgers, of letting the convoy fly past several times, which results in the following screen having an extra yellow Galaxip, up to a maximum of four. "The Galaxip

Gary with his beloved Galaxian machine – "The best money I've ever spent"

kind of acts like a smart bomb," explains Gary. "When you hit it, everything stops for three seconds, so you can use it when you're really under the cosh, say when it's gone into 'the swarm'. But you really don't want to let it get to the swarm..."

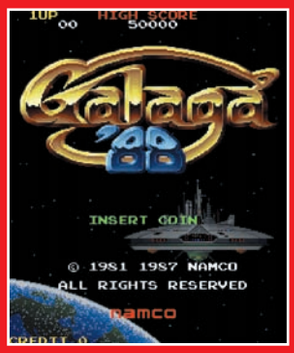
Just the mention of the panic-inducing endgame to a screen which you haven't cleared quickly enough, resulting in up to a dozen aliens swooping down and raining bullets upon you, brings us out in a cold sweat, which might explain why Gary's method is essentially to take out the first convoy for an 800 point maximum, then blast everything as fast as possible.

Man versus machine

A detailed description of his gaming technique is viewable on his website (**www.geocities.com/galaxip79/index.html**), which also chronicles his steady progress, a testament to the mantra of 'practice makes perfect'. By May 2004, he'd cracked 200,000. By July, he'd topped 300,000 and it was time to check the rules with Twin Galaxies. "You have to tape the whole game, from boot up to Game Over to prove you're not

›Galaxian legacy

Galaxian was developed by Namco and released worldwide in 1979 (the game was licensed to Midway for distribution in the US). Despite being a colourful Space Invaders clone, the game gave birth to whole series of sequels and updates. Galaga appeared in 1981, featuring more frantic gameplay and alien ships with tractor beams, and Gaplus (aka Galaga 3) arrived in 1984. The gimmick with the third game was that you could capture enemies and turn them on their fellow invaders. Gaplus failed to make much of an impression, but nonetheless two more sequels followed: Galaga '88 (1987) and Galaxian 3 (1990). The latter used laserdisc technology to project pre-rendered backdrops and included support for up to six players. It was a long way from the Z80-powered original!



cheating in any way," and thus a camcorder was rigged up looking down on the screen.

The breakthrough came during a week off work at the start of August. On Monday, a score of 337,420 was taped – enough to put Gary third in the all-time Galaxian high score list. He's all ready to send the tape off, when he decides on one more crack at it.

"It was late afternoon, the curtains shut to keep out the summer sun, and I scored 40,000 with my first ship, which is just rubbish. I was so near to stopping, rewinding the tape and starting again, but I actually felt good, in the zone, and I thought I'd go for it. Maybe it was because it was Friday 13th. The next life took me to 160,000, the third to 240,000. That still left 150,000 to get with my last man. It was nail-biting. I just kept thinking 'I won't do this,' but kept going, getting nearer and nearer. I was sweating, my hands were wet... the last few minutes, I was so lucky. I was tired and my reflexes had gone. The level before breaking the record, I just don't know how I survived. I glanced at the score and I was 500 short. I thought 'I only need the convoy,' and when I hit it... Aaah, that was it! I only managed a few more levels. My final score was 399,490. Some say it's a pity I didn't break 400,000 but I couldn't give a toss. I'd got the World Record."

Being a Manchester City fan, Gary is somewhat unaccustomed to success, and his celebrations, after two hours of graft and 114 screens, were somewhat muted. "There was no-one in the house to run to. It was deadly silent downstairs. I had a coffee and Bruce Springsteen's 'Promised Land' was playing in the background. It's difficult to explain how good it felt. I wanted someone to knock on the door so I could tell them."

And people did come knocking, albeit via the Net. The Twin Galaxies site did a major feature on Gary's achievement, congratulations came in from Perry Rodgers and a bizarre range of clothing has gone into production, featuring the grinning Mancunian on everything from BBQ aprons to dog coats (see **www.cafepress.com/galaxiesgifts/435909**). Rumours that a range of branded condoms are to be launched, promising 'high scoring' and with a lubricant that 'delays the swarm', remain unsubstantiated, but the height of only-in-America weirdness comes in the form of a touching tribute by Billy 'Perfect Pacman' Mitchell.

"He's the director of 'Ricky's Hot Sauces' and he's going to feature me on a special bottle of sauce. He's hoping to come over this year to present me with a case of it in person."

Bounty hunter

Despite the apparent magnanimity of the Americans, you sense they want the record back, as the Twin Galaxies site now offers a 'bounty' of $100 to anyone who can beat Gary's score, and $1000 for a score of one million.

"That's what I'm going for. I don't see my score lasting 20 years and I want to post a score of 700,000 this year. The game's difficulty level peaks around screen 20, so after that, it's just a matter of concentration, of doing the same thing again and again, like a battle of wits against the machine."

Gary still plays every night, his love for Galaxian undiminished. The British public clearly remember it with fondness too – his story has been picked up by The Sun, The Express and BBC Television – and we wonder if he can explain the game's lasting appeal.

"Everyone has a game from way back then, which transports you back there when you play it. I'd never got as far with Galaxian as I thought I could and because it's a pattern game, you get into this state of relaxation. I do play it to wind down. I just love it. I leave it on even when I'm not playing it, just to watch it... my pride and joy. My baby."

Gary's face has been pictured on a whole range of official Twin Galaxies' merchandise

RETRO AUCTION WATCH

Another month and yet another offering from the world of online auctioneering bargains and downright collecting madness. This month sees the return of a couple of auction favourites at knockdown prices, as well as a couple of rarely seen items. Oh, and that Moonwalker game again...

If you were around at the beginning of the home computing boom you will no doubt remember, and might even have owned, some of the less popular computer systems. Did you get a Memotech instead of an Amstrad, or a Tandy TRS80 rather than a Commodore 64? Maybe Mum bought that lovely Mattel Aquarius from the Kays catalogue? Well yesterday's disappointments are today's wallet-filling beauties.

One seller on eBay, rather than getting a nice rubberised Spectrum from Santa, was bought the rather less well supported Jupiter Ace. The Ace was an unusual beast in as much as it came complete with the programming language FORTH rather than BASIC which virtually everything else did. It was also very similar in looks to a ZX81, being almost a photographic negative of that particular machine, and not having much more in terms of memory. It may not be surprising then to find out that the two Jupiter Ace designers, Steve Vickers and Richard Altwasser, were both former employees of Sinclair. Hmmm, we say, with a wry smile.

The seller had put his virtually brand new Jupiter Ace up for auction and by the end of bidding had bagged himself a very respectable £119. For a hard to find machine in that condition complete with extras, we would say almost a bargain.

Staying with bargains and the always collectable world of Ultimate games, two of the hardest to find titles went for an absolute song recently. The two Ultimate compilations, The Collected Works on +3 disk for the Spectrum and Cosmic Battlezones for the BBC Micro, regularly pull in £50+ each, but you could have picked up the pair for just £39. The Collected Works reached a bargain bucket figure of £23, and Cosmic Battlezones the almost giveaway price of £16. Bizarrely, another copy of Cosmic Battlezones was up for auction at the same time, albeit ending a few days later, and finished with the final price of £46.65. Like comedy, online auction buying is all in the timing.

Not a bad price for this unique British micro

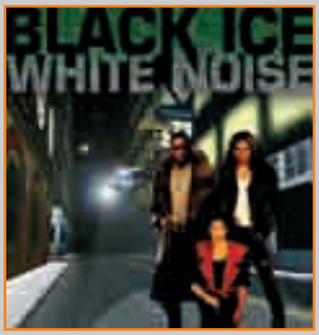
Watch out!

So, it's retro bargains and giveaways all the way on eBay after the Christmas period then? Wishful thinking we're afraid. The Game & Watch series, particularly when new and boxed, always gathers an international crowd of onlookers and admirers waiting to pounce on a potential bargain. This very rarely happens though.

The hard to find multi-screen G&W Rain Shower, brand new, boxed and as mint as a freshly minted mint, sold for a hugely impressive £437. When you consider the Retro Gamer G&W price guide in issue 10 estimated the value of this game at £250, why such a high final price? Maybe it was the 15 different international bidders trying to out do each other that raised the price to such a remarkable figure. The same seller also had a brand new, never been opened Donkey Kong G&W available which raised £258, once again highlighting the booming market for Game & Watches particularly in a mint bagged and boxed state.

Atari Jaguar games have never really been considered to be as collectable as other formats, but every system has its rarities and the Jaguar is no different. The game Black Ice White Noise, is a very rare game produced by Jagwire and was limited to a release of just 50 copies, all individually hand numbered. The lucky American purchaser paid an outstanding £124 for the title, which must surely rank as the most expensive Jaguar game ever.

Rain Shower – not one of the better known but certainly one of the more collectable G&Ws



Black Ice White Noise was never officially released, hence its collectable status

Bad moon falling

Finally, what better way to finish off than with the fantastic news that last month's super duper, incredibly mega rare, one of a kind (if you discount the other 80,000), highly sought after, collectible of the future (we think you get the idea) has actually sold. Michael Jackson's Moonwalker game for the Spectrum has been steadily moving in a downward spiral from its initial £220 start price. After several bouts of re-pricing and re-listing, a very plucky individual used the Buy-It-Now feature on eBay to purchase this potential relic of the future for the dazzling sum of £15. That's still £14.79 more than we thought it would get.

Maybe it was 'purchased' to finally put to an end the increasing embarrassment, the ongoing amusement to others, or the general rumpus on forums across the length and breadth of the civilized world that it had caused.

Well done. No, really, very well done.

eMag

The Retro Forum

Have your say... Send us some mail or make your voice heard on the forum!

Elitist

Firstly, great magazine etc etc. You get the drill.

Secondly, how about a feature on Sensible Software? Most of its games were brilliant; I'd love to read an article on Sensible. One on Cinemaware (who did Wings etc.) would be great as well. A feature on Public Domain games for the Amiga would also be good. It would also make a good coverdisc.

Also, on that idiot Peter in issue 11 – oh dear, we can't have people you've never heard of talking about their favourite games, can we? Presumably this makes the readers' top 100 irrelevant as well. After all, people you've never heard of voted for those games. And since I've never heard of you, your opinion is also irrelevant. Talk about elitist. Keep up the good work.

Graham Humphrey, via email

RG: Thanks for your letter Graham, and thanks for the article suggestions – they're always appreciated. Sensible was indeed a great development team and we may feature the company sometime soon. As for Cinemaware – watch this space. Very soon you'll have more than enough of the B-movie classics to satisfy your retro yearnings.

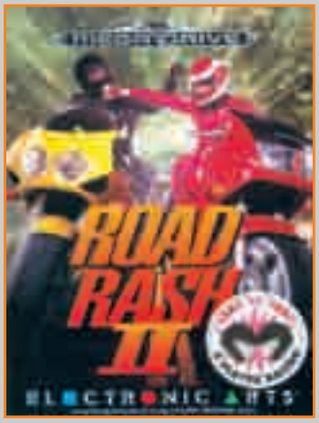
We think Peter's comments on our Mystikal interview were a little harsh, true. But, Retro Gamer is all about you, the readers, and everyone has an opinion. Who are we to stop you having your say?

Rash & burn

Any chance of featuring the story behind my all-time-favourite-game-of-all-time Road Rash – detailing its many incarnations across a variety of ports over the years? My personal favourite has to be the 3DO-based PC edition that also featured the infamous live-action cutscenes. Remember the nutcase aboard his yellow EXUP? And the sadistic LAPD cops? Don't forget the reassuringly amorous Jerry Hall-type, straight out of a ZZ Top video!

Eddie Lawson, via email

RG: Road Rash is without a doubt a classic game, and a theme that hasn't been reproduced since (well, not including the luke-warm Skitchin'). The thrill of upgrading to a better bike and kicking in the nitro before whipping a chain around some unsuspecting fool's neck and dragging him off his bike at break-neck speed is just bliss. Although, we'd have to opt for Road Rash II on the Mega Drive as the pinnacle of the series...



Rubbish Ocean

Just found a disturbing quote in your GX Factor article regarding Ocean – "Great game". What I

http://from.the.web.forum

This month on the Retro Gamer forum (www.retrogamer.net) we've been finding out which three games you are playing right now. Here's a selection of your posts...

ID: <Kaptain_Von>

1. Timesplitters 2 (GameCube): Just about as perfect as a console FPS (the original UT still rules on PC though) can be in my opinion and great for a quick blast to remove those feelings of wanting to take an AK47 to some of your colleagues. Oh and it has monkeys, zombies and Elvis impersonators in it. Can't wait for

TS: Future Perfect.

2. Mad Shark (Arcade, MAME): Scrolling shooter very similar in style to Raiden (as in it could almost be the same game with different sprites) but a shade harder. It has heavy firepower, spaceships, bonuses and explosions – what more could you want? Oh right, no it doesn't have monkeys.

3. Black Widow (Xbox): Regulars will know I rather like the arcade version of Black Widow and I got the Atari Anthology for Christmas. Yay! It's a damn good version of it, doesn't flicker as badly as the PSone version, although the difficulty/speed level seems to have been bumped up so it gets fast very quickly.

ID: <Turrican>

1. Metal Slug 3 (PS2): In the day and age where games are slated for being too easy, you get this on a re-release for Xbox/PS2 and

Star Letter

Our well-dressed friends at Joystick Junkies (www.joystickjunkies.com) produce official clothing based on loads of classic videogames, and the winner can select any T-Shirt from the range...

Are we sad?

12 issues and you're still supporting my regression theory. As I descend towards 30, I am in fact regressing back through my teens. That was a time when all I worried about was whether or not I'd remember to do my geography homework and if that girl in the Sixth Form would ever acknowledge my existence.

In those days I used to make several trips to the local newsagent around the same time each month. Why? I would sense the new issue of Crash was under the counter with my name neatly pencilled on the corner. Around the eighth trip I'd actually be right and rush the issue home with a level of excitement that I've realised has never been matched. That is until now when a new issue of Retro Gamer is launched through the letterbox.

Is that sad? I don't know. Although I know I just don't get that kind of exercise any more.

I was wondering if anyone else has fond memories of ZX Microfairs. I recall these were mainly held at Alexandra Palace (or Ally Pally as I knew it) and attracted enormous queues. Actually I'm wondering if anyone else was 'naughty' and avoided the queue by walking quite blatantly through one of the open side doors to the arena. I suspect these were probably being used innocently to allow a little fresh air to enter, not young unpaying punters and their fathers.

A search on the Web reveals there isn't much written on the subject of these historic Microfairs. I therefore suggest an article be written for your magazine immediately. If anyone can articulate the assault to the ears from hundreds of amplifiers battling to make their Spectrum beep louder than the next stand, that'd make a good start. The combined feeling of relief and embarrassment I experienced when I, er, lost my Dad and was instructed by Tannoy to make my way to Lost and Found would make an excellent second paragraph. I'm sure the rest will flow naturally from there.

Andy Hawkins, via email

RG: We remember many an old computer trade fair and their haphazard setups, dodgy venues and questionable organisers, and the Speccy in particular produces some of our fondest memories. Retro Gamer is all about personal experiences and views on the retro world, and we're always looking for new writers to contribute their own specific experiences to the magazine, so get in touch – you never know.

And don't worry – if it's sad to get excited about anything retro Andy, then we're the saddest guys around. We're kind of proud of it actually!

remember from those days is Ocean's terrible games. It would buy licences from the movie world and would just capitalise on them. Please don't look back at the past with rose-tinted glasses. Ocean was an awful software house and produced canned, conveyer belt garbage every time. I was immensely satisfied to learn that Ocean stopped producing games, and I really believe it was fundamental in the whole commercialisation of the games industry because it was such a large software house and had the capital to farm out awful titles without worrying about the loss. Ocean Software was crap!

Anyway, your magazine has given me great reading ever since it started, so carry on with the excellent work!

Chris, via email

RG: We think your statement is a bit sweeping there Chris. While we certainly wouldn't disagree that Ocean was responsible for some truly awful titles in its time, you can't overlook some of the excellent games the company produced. What about Wizball (and the equally impressive WizKid), Chase HQ (Spectrum), Robocop 3 (ST and Amiga), The Great Escape, Where Time Stood Still, and of course, Head over Heels? All superb games, and worthy of anyone's time.

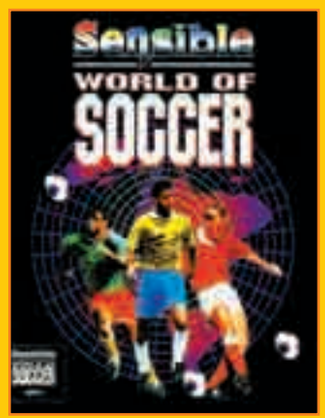
realise how tough games can be. It's like old shoe leather in some places, but that's the reason why you keep coming back to it, not to mention it has some of the most finely animated and polished 2D graphics ever seen in any side-scrolling game. A cracking slice of retro.

2. Pro Evolution Soccer 4 (PS2): Quite simply the closest thing to football you can get in computer form. In most cases you are either a FIFA or a Pro Evo person, but I feel Pro Evo wins it by a country mile because it simply *feels* like football. It's a game that brings out your emotions and with the possibility of online gaming through Xbox Live, it's simply unmissable. Genius.

3. Gradius V (PS2): If ever there was a game that mixes traditional gameplay with sumptuous graphics then this is the weapon of choice. Treasure made something truly special, but when you look at its back catalogue, it comes as no surprise really. Add to the great graphics a difficulty level that borders on criminal and you have a genuine 'one-more-go' title which can sit proudly on anyone's shelf.

ID: <King Monkey>

1. Sensible World of Soccer (Amiga): I upgraded to Windows XP some time ago and couldn't play SWOS anymore. I even considered going back to W98, but then I bought PC Emulate and now my life is complete again. This is the greatest game on any system.



2. CounterStrike (PC): The best online game and I suppose it could be classed as retro now. It's a great game you can just drop into for 15 minutes or six

Keep it coming

So Retro Gamer – 12 issues in and I'm still buying your magazine every month, so you must be doing something right as I'm not easily parted from my money! I've pretty much enjoyed every issue so far, even reading features on consoles and computers that I'd previously not even given the time of day.

My favourite features so far have been the Lords of Midnight and Level 9 articles as they brought back many a happy memory.

I've just bought Issue 12 and went straight to the 'Big in Japan' feature which proved to be highly entertaining and very informative. I love reading that type of article, so can I put in a request for more of the same please? It's always interesting to see what gaming and the retro scene is like in other countries.
Ryan Summers, via email

RG: Glad you liked the Japan piece Ryan, and you'll be happy to know that we'll be running a regular Japanese retro round-up in the magazine from now on.

Celtic computing

I have just been reading your last issue and I find it a very good magazine, but I feel that the first colour machine to be built in the UK has not even has one mention in your magazine. The machine in

question is the Dragon 32 and its sister, the 64. I know that they were made in Wales, and I cannot remember the processor it was based on (I think it was the 68000) but it was a great system. It was also one of the first to have a disk drive add-on. I also know that when they stopped making it in Wales production went to Spain, where it sold quite well. Please can you do a feature on this system?
K. Rackley, via email

RG: Don't fret, we're not being xenophobic and ignoring our Celtic cousins. We do plan on featuring the Dragon in a future issue, and we're even in touch with someone who's eager to write such a feature. It's just a matter of time really...

Power to the people!

I am a long-time reader with every copy from the first issue to now. I have even emailed before, but it never got in.

I think it's nice that the old games are being re-issued on the new machines. As with albums, there's nothing like a classic. It also means that companies may be more amenable to releasing more than just old software. I hope that the TV consoles are just the next step to re-issuing the genuine gaming articles, albeit in limited issue.

I think it could be a good idea for Retro Gamer to be a very gentle pressure group. For example, I reckon the current owners of Commodore should re-release the Commodore 64, say in a batch of 200. I'm sure many people still have games they couldn't quite bear to part with after chucking out a faulty machine. I can't stand those Atari, C64 or NES-alike TV game things. You can't even use your original games on them, so I think a 'proper' re-release (with tape and disk drive) should be considered. I know you can have emulators and data transfer equipment, but with no original machines your disks are still lying alone and unplayed, which is a shame if you own out-and-out gaming crackers (or your own priceless work) which you don't want to deteriorate. All it needs is a petition. What do you think?
Michael Braisher, via email

RG: It's a wise move to try and get your views over to the people in power, and a petition would be a great idea. Sadly though, the TV games market is very popular at the moment, with new models coming out almost every month. And while sales of devices with individual games featured on them keeps up, we can't see a re-release of a single unit that could play them all. But, there's always eBay...

Bargain! I'll have 2!

The magazine is getting better with every issue. I thought that the first issues were good but were pitched for people who have just (or are about to get into) retro gaming with the basic common machines featured prominently. The last few issues though, have catered for the more discerning collector and retro fan with some great articles and interesting rarities. A case in point that I liked particularly was the C64 cart vs. cassette game variations (Zaxxon being a point of highlight) in issue 12. It's this sort of info that makes for good reading so I hope you continue with the good work. As a retro collector of eight years now I yearn for info on those obscure gaming items and rarities, even if I will never own them myself.

Which brings me nicely to the reason for emailing you – to point out the Atari COSMOS on eBay currently (in case you haven't seen, it has a 'Buy-it-now' of just under £10,000!).
Leigh Hills, via email

RG: Thanks for the link Leigh – that's certainly an auction highlight. I'm sure Richard will cover it in his next auction watch.

We hope you like the changes we've made to the magazine. Our main aim is to try and keep a good balance of content each month, and although some older systems are considered 'mainstream', there are still people who love their chosen formats, mainstream or not, and we owe it to them to cover everything.

hours and not even notice the time go by.

3. OutRun 2 (Xbox): Picked it up for £20 in Game and have now started to master it. Excellent arcade fun and it has that retro feel. Pity the original OutRun emulation is pants though.

ID: <Retro-Mark>

1. Ikaruga (Dreamcast): I actually set-up my Dreamcast to play this. I find it completely satisfying with respects to so much going on at the same time. The graphics and sound are excellent. I had never heard of it until someone placed a screenshot on the forum.

2. R-Type 2 (Arcade, MAME): Being a shoot-em-up fan, this to me has to be one of the best side-scrollers of all time. Again,

plenty going on, and it keeps you coming back for more. There's also a PC version called G-Type that's ok, but not as good as the original.

3. Halo 2 (Xbox): Loved the first, and the second started off so much like the original. Why produce a game, increase the detail, add a few bits here and there, make it so much like a game that got so much praise? A complete waste of time.

ID: <Neilos626>

1. Super Mario Kart (SNES): Still addictive as hell after all these years and I'm determined to get a best time of under 1min on Mario

circuit one. This is my new goal in life.

2. Tales of Phantasia (SNES): How did this game slip me by when I had my SNES as a teenager? I have just discovered this excellent RPG this week through emulation and can't stop playing. The graphics show attention to detail I've not seen on a SNES game before.

Retro PC

A while back I dug up an old 486 and attempted to get all my old favourite PC games working, with the focus being on the old classic (and expensive) Roland LAPC-1 and SoundBlaster soundcard combo.

To be honest, I had limited success. It is remarkable just how much knowledge went into PC gaming. Getting config.sys and memory usage balanced seemed different for each title. Add to that the hardware problems when using multiple sound cards regarding IRQ settings, software mixers and physical card jumpers. It was a nightmare. Although I suppose it helped get me where I am today, doing consultancy for Microsoft for the past three years.

It occurred to me that while I don't have an old PC anymore, I do still have my Roland soundcard (beautifully boxed). I also have an old Soundblaster knocking around somewhere. In addition, I have a number of classic PC games (perfectly preserved) that made the most of the Roland card. Classics such as The Dynamix Series of adventure games (Rise of the Dragon, Heart of China, Willy Beamish), a number of Sierra Kings Quest titles, all the old Wing Commander games, and Ultima Underworld.

So, my thinking got around to scribing a light hearted journey back in time to remind people that getting games running under WindowsXP isn't that bad after all. I'd start with CGA titles like Sopwith, and move on through the ages to VGA, DOS, high-res VGA, Windows, Direct X and so on.

I'd be interested to hear your thoughts around this type of subject, and if indeed Retro Gamer accepts piles of rambling wordage from IT Consultants stuck in the past, like myself. Heck, I reckon I could even persuade my old soundcards and software to pose for a photo or two.

Andy Hastings, via email

RG: This is what it's all about Andy, and being stuck in the past is a great place to be! We always welcome contributions from anybody who has an interest in all things retro and a good idea, and you seem to qualify on both counts. Getting old games to work on modern PCs is indeed a headache-inducing task (if only we could play the old Tex Murphy games again!), and we guarantee that an army of PC owning retro fans would welcome a helping hand. We'll be in touch.

Arcade for sale?

I am a keen retro gamer and I am looking to buy my first arcade cabinet, but have no idea where to start finding one. I've checked eBay but there's nothing much of consequence there. Could you point me in the direction of any dedicated sites or sellers where I could get one. Another thing I'm not too up on is the price of them. What's the average price of cabs? I'm sort of starved of any retro shops where I live so I need some help. Any help you could give would be great.

As for your magazine, I'm still loving it. Maybe you could do an in-depth feature on the Final Fantasy series. I'm still hooked on these games (the older ones mainly) and still regularly play these games through.

Chris Clark, Watford

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RG: Hi Chris, thanks for your email. Getting hold of an arcade cabinet can be a difficult and expensive business, and aside from places such as eBay, which you've already tried, it'd be hard to recommend a place for you to contact. There are plenty of sites online that deal in coin-op parts, although many of these are in the States. We think your best bet would be to locate a local arcade operator and inquire whether they have any old stock available. Alternatively, if you have the time and the skill you could try to build your own. We did a full guide to this in issue six, and we still regularly use our very own coin-op for countless matches of Puzzle Bobble and Puyo Puyo.

3. Halo 2 (Xbox): Will FPS games on consoles get any better than this? I can't see it. I couldn't put this down until I completed it and Sunday nights are now dedicated to four player sessions, with plenty of swearing and Stella.

ID: <Mel the Bell>

1. Mario Kart Double Dash (GameCube): Because Mario Kart is one of the greatest game series ever and I've finally caught up with the next generation – just as the GameCube's going to be pushed down the line with the release of the Nintendo DS and the impending Revolution. Ho-hum, at least I'll get cheaper games

2. Area 51 (Spectrum): By Jonathan Cauldwell, the greatest author of new Spectrum games. I've just been trying all his games that I can find. Area 51 is a fun Manic Miner style platform game. I've also been trying Egghead and Egghead in Space by Jonathan too. I believe he's got a new game out from Cronosoft soon, called Higgeldy Piggeldy?

3. Top Hat Willy (PC): I've been playing this quite a bit recently. I'm not sure about the way Miner Willy moves, but it's an excellent remake.

ID: <LeeT>

1. Oh My God! (Arcade, MAME): From first impressions, it looks like a Columns variant with a convoluted plot in Japanese. However it keeps pulling me back with its highly addictive gameplay. It's pretty hard and I rarely get past the first few levels, so maybe that's why I constantly come back to it.

2. Super Mario Bros 3 (NES): The definitive platformer? I would safely say so – a lot better than the previous SMB game, this third title is the computer game equivalent of eating a big bar of chocolate – smooth, silky and tasty!

3. Willow Pattern Adventure (C64): An often overlooked title from Firebird's budget range. It's a platformer with an oriental theme – rescue the princess whilst collecting swords and negotiating a maze. You must try this!

Retro Coverdisc

This month's coverdisc features a world exclusive in the form of Amiga Forever Version 6.0. This is the first time that the only legal Amiga emulation solution has been included on a magazine coverdisc. In addition to the WinUAE and WinFellow emulators, the package includes games, demos, utilities and the all-important Amiga ROM files. And that's not all, as this disc contains over 50 new retro remakes and some fantastic extras!

step 1 Place the coverdisc into your CD/DVD drive and it should start automatically. If not, select Run from the Start menu and enter D:\browser.exe (assuming that D: is the letter of your CD/DVD drive). When the browser appears, click OK to accept the declaration.

step 2 Some games/programs are provided as .exe files and these will run or install straight from the disc. If the program chooses to install itself, simply follow the onscreen prompts and then wait while the files are copied to your hard drive.

step 3 Many games/programs are stored in .zip files, so you might need an archive manager like WinZip, which is under the Utilities browser tab. Extract all the files from the .zip archive using the Extract feature and place them in an empty folder, then run the .exe file.

step 4 If you are looking for a particular game/program, click the Search button and enter a keyword. The browser program will search the disc and place all the relevant results under the left most browser tab. They can now be accessed directly from here.

Problem solving

If you're having a problem with a particular program on our coverdisc, please view the help file in the program for assistance. You might also consider visiting the website of the program author for further help. If this fails, please email: techsupport@livepublishing.co.uk.

If you are having problems with the CD, first check that it is not dirty or scratched. CDs can be cleaned by holding them under the cold water tap and gently rubbing the silver side with a tissue. Dry it carefully with another tissue.

If the disc still doesn't work, then it may be faulty. Faulty discs should be returned to Retro Gamer, Live Publishing International Ltd, Europa House, Adlington Park, Macclesfield, Cheshire, UK, SK10 4NP. We will replace all genuinely faulty discs.

Coverdisc helpline

01625 855051

techsupport@livepublishing.co.uk

(Monday-Friday 10am-4pm)

Helpline for coverdisc problems only

DISCLAIMER

Some of the programs on the Retro Gamer disc interact with your PC on a fundamental level. We strongly advise you back up your personal data before using the disc. Due to the way the Retro Gamer disc is compiled, Retro Gamer, Live Publishing International Limited and/or any associated company and/or individual cannot take responsibility for damage to your PC or otherwise arising from use of the coverdisc. You use the programs on the disc at your own risk.

Six of the best

This month we've got an amazing collection of quality PC retro remakes on the disc, and here's just a small selection of what's on offer

Barbarian

Palace Software's classic one-on-one combat title arrived long before the likes of Street Fighter and Mortal Kombat were even a twinkle in a developer's eye, and the gore was flowing in abundance even then. As the eponymous barbarian you goal was to fight through a number of other warriors, until you finally won the prize of facing the evil sorcerer Drax – all for the hand of a fair maiden.

This remake reproduces the original game perfectly, and aside from a little graphical polish, this is a perfect version of a classic game. Go for the head chop!

AfterBurner 3D

Sega's classic arcade blaster AfterBurner let kids all over the world live out their Top Gun dreams, roaring through the air in an F-16, slamming in barrel rolls and getting down to the electro-rock soundtrack.

This remake of the game takes the sprite-based original, turns it all 3D, and produces a stunning reproduction and a great homage to the arcade. Don't worry though, it may be in 3D, but this is classic AfterBurner all the way, complete with lock-on missiles, barrel rolls and spectacular explosions.

Snake Clone

Despite possessing a soundtrack straight from the QVC Shopping Channel, Snake Clone is a great update of the classic reptile-feeding title. The game has been created with a 3D engine, and sports some very smooth 3D graphics. Even better is the 360 degree control over the snake, rather than the classic four way movement. As you progress through the levels you have to find more bonuses and contend with obstacles such as trees, pits, and of course, your ever-extending body.

Flobo Puyo

Puyo Puyo gets the remake treatment for the PC in this excellent version of the classic puzzler. Flobo Puyo is a straightforward remake of the bean-filled title from Sega, and by dropping chains of coloured beans onto each other you can eliminate them from your play area and send colourless beans over to your opponent.

Flobo Puyo is a fast and fluid remake that has big, bold visuals, simple controls and a two player mode to challenge your mates at. Quite why there's an old man hiding in a bin in the middle of the screen though is beyond us.

Torus Trooper

This is one of the best freeware retro-styled games we've ever come across, and while it's not an actual remake of an original title, it has more than its fair share of inspirations.

The game itself is simple. As the Torus Trooper, you have to fly through a never-ending, constantly twisting tunnel while fighting off countless enemies along the way. You have unlimited lives, but there's a time limit to keep an eye on. Kill enemies, and you'll add to your time. Lose lives, and time will be deducted from your remaining seconds.

Visually you have to see the game moving to appreciate it, and the classic wire-frame graphics fly by at an eye-scorching pace. Thumping music accompanies the proceedings and the whole thing is so arcadey it hurts. Quality.

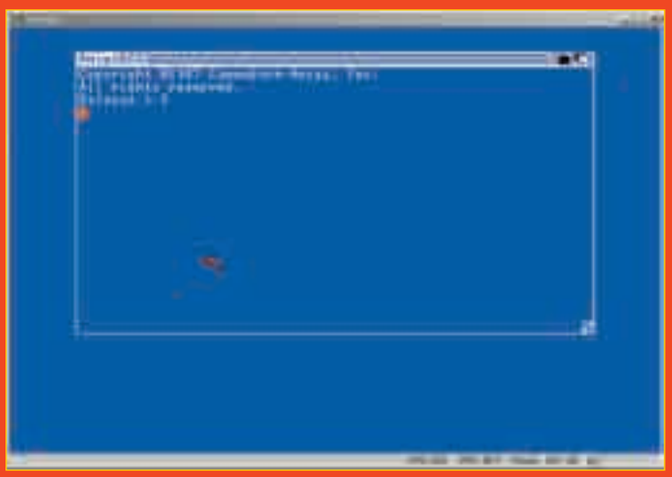
Jacky Bomb

Blatantly titled, and a clear remake of the bomb-gathering platformer Bomb Jack, this is a great little game that actually adds elements to the original. As in Bomb Jack, you have to fly around the levels collecting bombs while avoiding the patrolling enemies. You can run faster, jump incredibly high, and by tapping the Shift key you can float around.

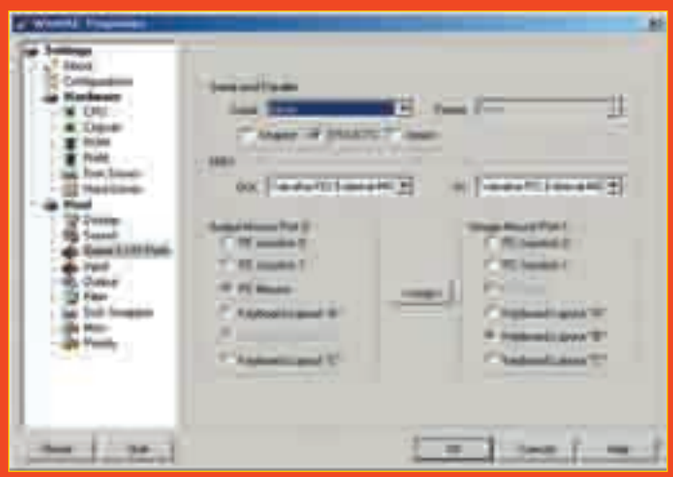
A nice addition to the game comes into play after you've collected all of the bombs. 'Bombs Away!' appears onscreen and you then have to place bombs, Bomberman-style, next to the enemies on the level to blow them up.

Getting started with Amiga Forever 6.0

step 1 Launch the Retro Gamer coverdisc menu and click the button marked 'Amiga Forever 6.0 Special Edition'. Amiga Forever runs straight from the CD and does not install itself on your PC. After a brief pause you'll see the Amiga Forever front-end.



step 2 For the purposes of this example, we will launch one of the games. Click the Games tab and choose a game. Now wait while the game loads. By default, WinUAE emulates the Amiga's floppy disk drive speed, so it may take up to a minute to load.



step 3 At any time you can press F12 to display the WinUAE Properties dialog. Select your control method by clicking the Game and I/O Ports option. Opt for Keyboard Layout B in Amiga Mouse Port 1. This lets you emulate a joystick using the cursor keys and left Ctrl to fire.

step 4 You can quit emulation by simply pressing Alt+F4 – this will return you to Windows. For more information on how to use the program, click the 'Amiga Forever Documentation' button on the coverdisc browser or visit www.amigaforever.com.

Upgrade Amiga Forever...

The version of Amiga Forever on the coverdisc only emulates the Amiga OS 1.3 environment. While this allows you to emulate an Amiga 500, and therefore the vast majority of Amiga software, you may want to upgrade to the retail version of Amiga Forever which includes full support for the OS 3.X environment, as well as a number of other very useful additions.

To upgrade to the retail version, launch Amiga Forever and simply click on one of the unavailable links. This will automatically open your Web browser and direct you to the Amiga Forever Online Shop where you can securely order the upgrade.

Back in the day

When the pixel was king

Issue 14 hits the shelves 17th March 2005

THE FUTURE? IT'S ALL ABOUT THE PAST

RETRO GAMER

>>>Endgame<<<

Double Dragon Advance on the GBA – brought bang up to date with meaner enemies, brutal weapons, killer moves, and perhaps the soppiest game ending ever...

With Big Boss Willie defeated, Jimmy and Billy battle it out for Marion's affections

But instead of slapping each other senseless, the brawling brothers pause for thought

Having duffed up half the city, realisation suddenly dawns on our weary heroes

Presumably that's not a sunset, but a satellite of love exploding in the sky

Brotherly love rains down and the threesome take to the road. Next stop San Francisco...